# EXHIBIT 16

## 2020 REPORT ON EMPLOYER FIRMS

# SMALL BUSINESS CREDIT SURVEY

FEDERAL RESERVE BANKS *of*

Atlanta • Boston • Chicago • Cleveland • Dallas • Kansas City • Minneapolis
New York • Philadelphia • Richmond • St. Louis • San Francisco

# TABLE OF CONTENTS

# ACKNOWLEDGMENTS

The Small Business Credit Survey is made possible through collaboration with business and civic organizations in communities across the United States. The Federal Reserve Banks thank the national, regional, and community partners who share valuable insights about small business financing needs and collaborate with us to promote and distribute the survey.[1] We also thank the National Opinion Research Center (NORC) at the University of Chicago for assistance with weighting the survey data to be statistically representative of the nation's small business population.[2]

Special thanks to colleagues within the Federal Reserve System, especially the Community Affairs Officers,[3] and representatives from the U.S. Small Business Administration, America's SBDCs, U.S. Department of the Treasury, Consumer Financial Protection Bureau, Opportunity Finance Network, Accion, and The Aspen Institute for their support for this project.

This report is the result of the collaborative effort, input, and analysis of the following teams:

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*The views expressed in the following pages are those of the report team and do not necessarily represent the views of the Federal Reserve System.*

1 *For a full list of community partners, please visit www.fedsmallbusiness.org.*
2 *For complete information about the survey methodology, please see Methodology.*
3 *Joseph Firschein, Board of Governors of the Federal Reserve System; Karen Leone de Nie, Federal Reserve Bank of Atlanta; Prabal Chakrabarti, Federal Reserve Bank of Boston; Alicia Williams, Federal Reserve Bank of Chicago; Emily Garr Pacetti, Federal Reserve Bank of Cleveland; Roy Lopez, Federal Reserve Bank of Dallas; Jackson Winsett, Federal Reserve Bank of Kansas City; Alene Tchourumoff, Federal Reserve Bank of Minneapolis; Tony Davis, Federal Reserve Bank of New York; Theresa Singleton, Federal Reserve Bank of Philadelphia; Christy Cleare, Federal Reserve Bank of Richmond; Daniel Davis, Federal Reserve Bank of St. Louis; and Adrian Rodriguez, Federal Reserve Bank of San Francisco.*

# EXECUTIVE SUMMARY

The publication of this report comes at a particularly challenging time for our nation's small business sector. Small businesses across the country are grappling with the profound impact of the COVID-19 pandemic on their operations and on their owners' and employees' livelihoods. As policymakers and service providers begin to enact programs to help firms weather the economic challenges, insights about the financial position of small businesses can provide a useful perspective on how best to target funds and services. The Federal Reserve Banks' Small Business Credit Survey (SBCS), fielded in Q3 and Q4 of 2019, offers baseline data on the financing and credit positions of small firms *before the onset of the crisis*. The survey findings provide insights into firms' preparedness to withstand the shock, their existing debt levels, and the actions they may take in response to an unexpected loss of revenues.

Understanding that the potential effects of COVID-19 are substantial and will vary by type of business, accompanying this report is a separate analysis that explores small business resiliency. This supplemental brief, *Can Small Firms Weather the Economic Effects of COVID-19?*, is published concurrently with this report. A subsequent report will provide results from nonemployer firms.

The results of the survey raise several important considerations in the current environment: most firms are ill prepared for a sustained period of revenue loss; firms' reliance on personal funds could mean severe repercussions for those individuals and households in the event of failure; and many small businesses do not rely on traditional banks for credit, and, therefore, any program designed to support them should take that into consideration.

## SURVEY FINDINGS

The importance of small businesses to our nation's economy cannot be overstated. Small employer firms, those with 1–499 employees, account for 47.5% of the private-sector workforce[1] and are vital to the fabric of local communities. The SBCS delivers timely information on small business financing needs, decisions, and outcomes to policymakers, lenders, and service providers. The 2019 survey yielded 5,514 responses from small employer firms with 1–499 full- or part-time employees (hereafter "firms"), in the 50 states and the District of Columbia.[2]

Overall, the survey finds

***Firm performance was relatively strong prior to the pandemic.***

- Small business respondents reported a strong end to 2019. A majority of small businesses (56%) reported that their firms had experienced revenue growth, and more than one-third added employees to their payrolls.
- The shares of firms reporting revenue growth, profitability, and employment growth were all virtually unchanged from 2018.

***Profit margins were tightening for many.***

- Input costs increased for 76% of firms over the prior year. Profit margins fell for 40% of firms. Of firms that reported higher input costs, 61% raised the prices that they charge.

***Firms have common cash flow challenges, and many rely on personal funds.***

- In the prior 12 months, 66% of employer firms faced financial challenges; the most common challenge was paying operating expenses (43%).
- If faced with a two-month revenue loss, 86% of firms would need to take some action to supplement funding or cut expenses.
  - The most common action (47% of firms) would be to use the owner's personal funds.
  - Another 17% of firms would have to close.
  - Among firms that applied for financing in the prior 12 months, 46% would plan to take out additional debt.
- Owners' personal finances remain deeply intertwined with the finances of their businesses, with 88% of firms relying on an owner's personal credit score to secure financing. Additionally, 56% have used funds from their personal savings, friends, or family within the last five years to support their business.

***Debt holdings are common and typically small dollar, and nearly half of recent credit applicants have experienced funding gaps.***

- Forty percent of firms hold outstanding debt in amounts up to $100,000. A majority of firms used personal guarantees as collateral to secure this debt.
- Demand for new financing has been steady, with 43% of firms applying for new credit in 2019, in line with the 43% that applied in 2018, and 40% in 2017.
- Large and small banks remain small firms' top choices when applying for credit, followed closely by online lenders; having a relationship with a lender drives many firms to apply to banks, but the chances of being funded and speed of credit decisions are top reasons firms apply to an online lender.
- Fifty-one percent of applicants received the full amount of financing sought. Of the firms that did not receive the full amount, 20% indicated that the firm chose to decline some or all of the approved financing—most often because the interest rate was too high.

1 *U.S. Small Business Administration, "2018 Small Business Profile," https://www.sba.gov/sites/default/files/advocacy/2018-Small-Business-Profiles-US.pdf.*
2 *The Small Business Credit Survey collects information from both employer and nonemployer firms. The 2019 survey yielded 4,020 responses from nonemployers.*

# EXECUTIVE SUMMARY (CONTINUED)

***Though banks are the most broad-reaching lending channel, many small businesses do not use bank funding.***

- Less than half (44%) of small firms have obtained funds from a bank in the last five years. The most common source of funding for firms overall was personal savings or funds from friends or family.
- Among firms that have obtained external financing—outside of family or friend networks—banks were the most common channel (44% of firms), followed by online lenders (22% of firms) and credit unions (6% of firms).
- The use of bank financing varies significantly by race and ethnicity of owner, firm revenue size, and credit risk, with highest reported bank funding found among firms with >$1M in annual revenues (57%), firms with low credit risk (55%), and firms with non-Hispanic white ownership (46%). By contrast, firms with Non-Hispanic black ownership are half as likely to have obtained bank funds (23%), and rates are similarly low among microbusinesses (that is, $100,000 or less in revenues)—24%—and those with Latino ownership (34%).

## ABOUT THE SURVEY

The SBCS is an annual survey of firms with fewer than 500 employees. These types of firms represent 99.8% of all employer establishments[3] in the United States. Respondents are asked to report information about their business performance, financing needs and choices, and borrowing experiences. Responses to the SBCS provide insights on the dynamics behind lending trends and shed light on noteworthy segments of the small business population. The SBCS is not a random sample; results should be analyzed with awareness of potential biases that are associated with convenience samples. For detailed information about the survey design and weighting methodology, please consult the Methodology section.

Given the breadth of the 2019 survey data, the SBCS can shed light on various segments of the small business population, including startups and growing firms, microbusinesses, minority-owned firms, women-owned firms, firms located in low- and moderate-income communities, and self-employed individuals (nonemployer firms).

3 *U.S. Census Bureau, County Business Patterns, 2017.*

# PERFORMANCE

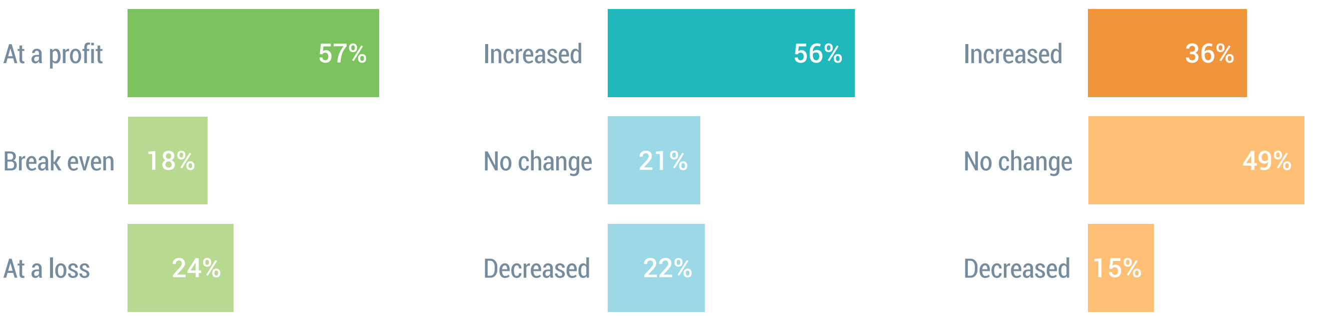
## The shares of firms reporting revenue and employment growth in 2019 were nearly unchanged from 2018, and the net share of firms operating at a profit remained flat.

**EMPLOYER FIRM PERFORMANCE,** *2019 Survey* (% of employer firms)

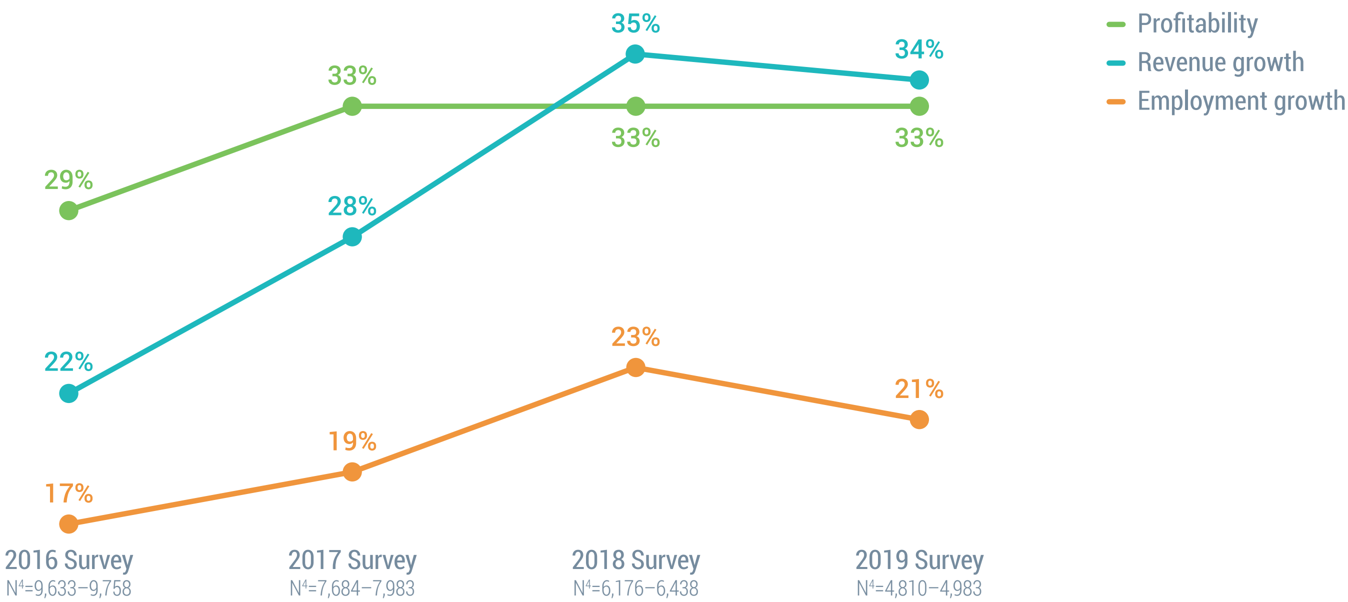
**PROFITABILITY,**[1]
*End of 2018*
N=4,942

**REVENUE CHANGE,**[1]
*Prior 12 Months*[2]
N=4,983

**EMPLOYMENT CHANGE,**
*Prior 12 Months*[2]
N=4,810




**EMPLOYER FIRM PERFORMANCE INDEX,**[3] *Prior 12 Months*[2] (% of employer firms)




1 Percentages may not sum to 100 due to rounding.
2 Approximately the second half of the prior year through the second half of the surveyed year.
3 For revenue and employment growth, the index is the share reporting growth minus the share reporting a reduction. For profitability, it is the share profitable minus the share not profitable.
4 Questions were asked separately, thus the number of observations may differ slightly between questions.

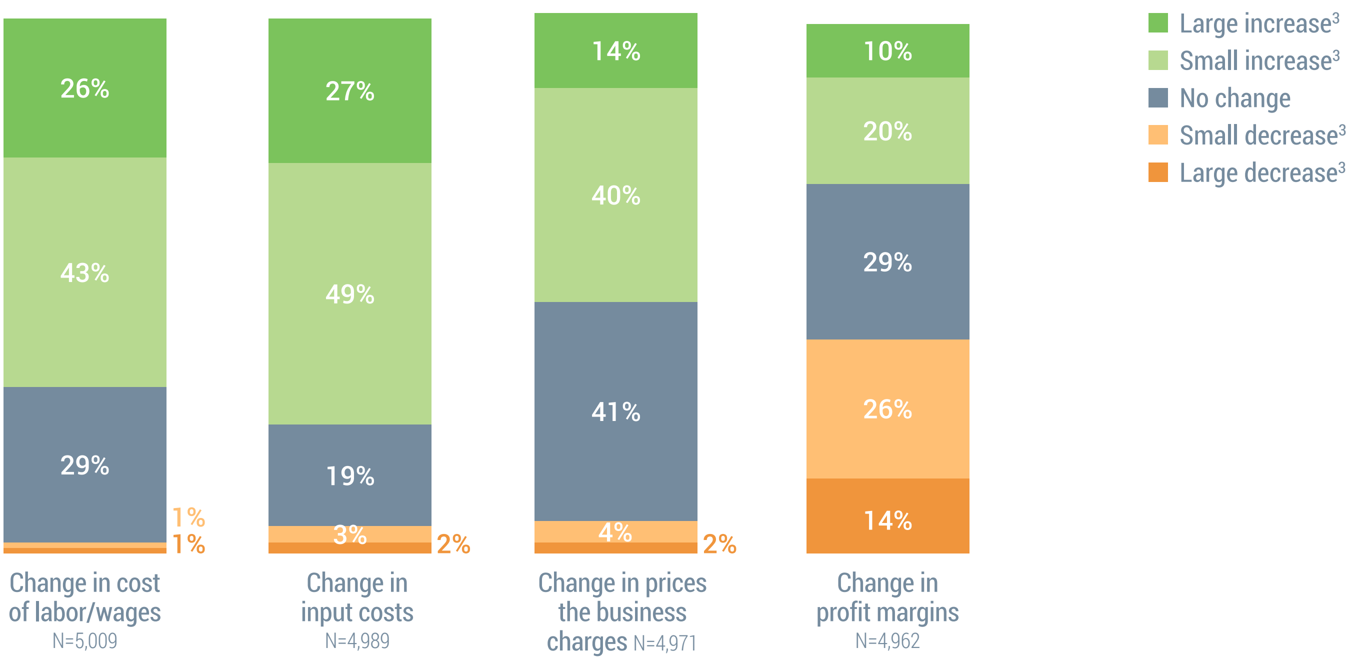


Source: Small Business Credit Survey, Federal Reserve Banks

# PERFORMANCE (CONTINUED)

## 76% of small firms saw their input costs increase over the prior year. 40% reported falling profit margins.

**CHANGES IN COSTS, PRICES, AND PROFITABILITY,**[1] *Prior 12 Months*[2]
(% of employer firms)




## Of firms that saw higher input costs, 61% raised the prices that they charge.

**CHANGE IN PRICES CHARGED BY FIRMS WITH INCREASED INPUT COSTS** N=3,813
(% of employer firms with increased input costs)

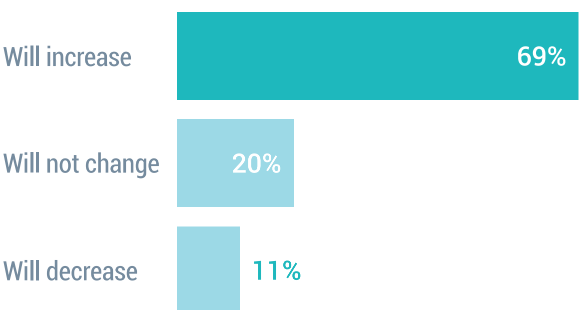

1 *Percentages may not sum to 100 due to rounding.*
2 *Approximately the second half of 2018 through the second half of 2019.*
3 *"Large" refers to a change of 4% or greater. "Small" refers to a nonzero change that is less than 4%.*

# GROWTH EXPECTATIONS

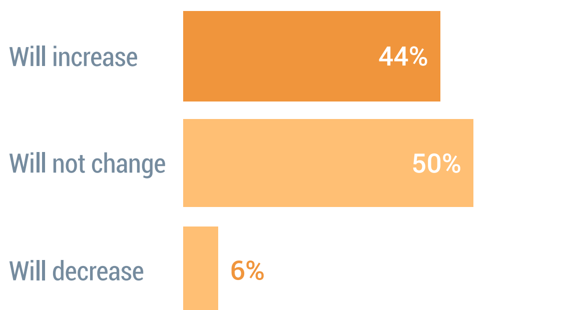
## The 2019 survey revealed that a majority of firms were anticipating revenue growth in the coming year, though the net share of firms expecting revenue growth declined relative to the 2018 survey.

**EMPLOYER FIRM EXPECTATIONS,** ***Next 12 Months***[1] (% of employer firms)

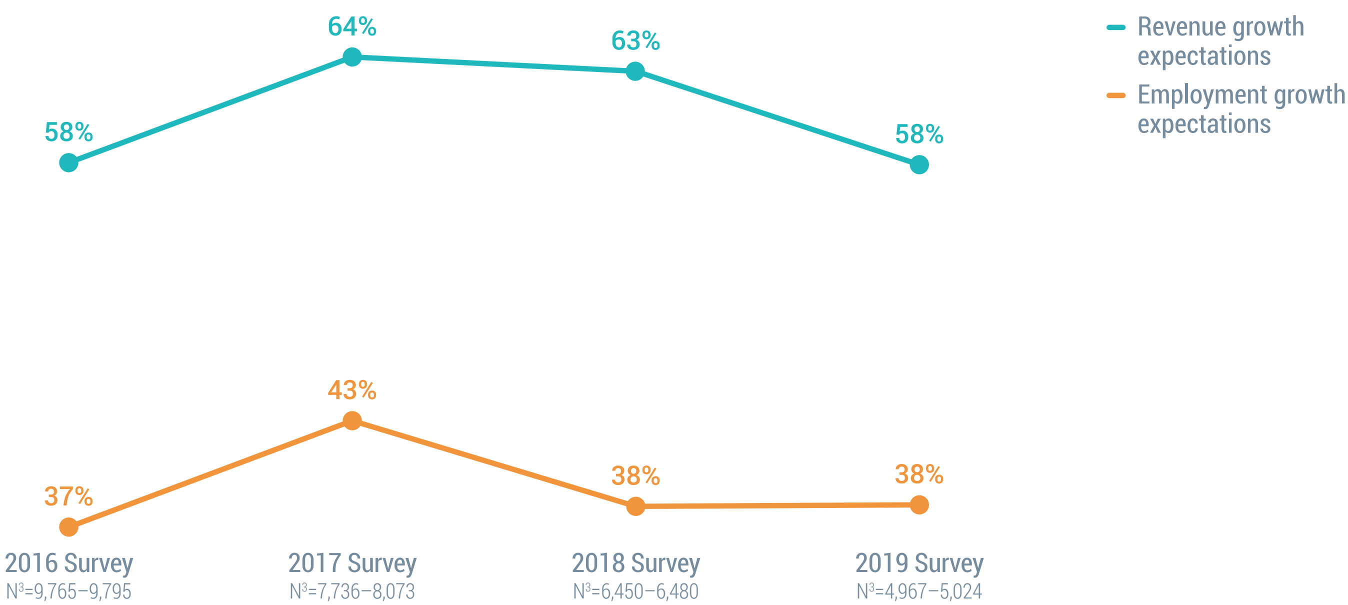
**EXPECTED REVENUE CHANGE** N=4,967




**EXPECTED EMPLOYMENT CHANGE** N=5,024




**EMPLOYER FIRM EXPECTATIONS INDICES,**[2] ***Next 12 Months***[1] (% of employer firms)




1 *Expected change in approximately the second half of the surveyed year through the second half of the following year.*
2 *The index is the share reporting expected growth minus the share reporting a reduction.*
3 *Questions were asked separately, thus the number of observations may differ slightly between questions.*



*Source: Small Business Credit Survey, Federal Reserve Banks*

# GROWTH AMBITIONS

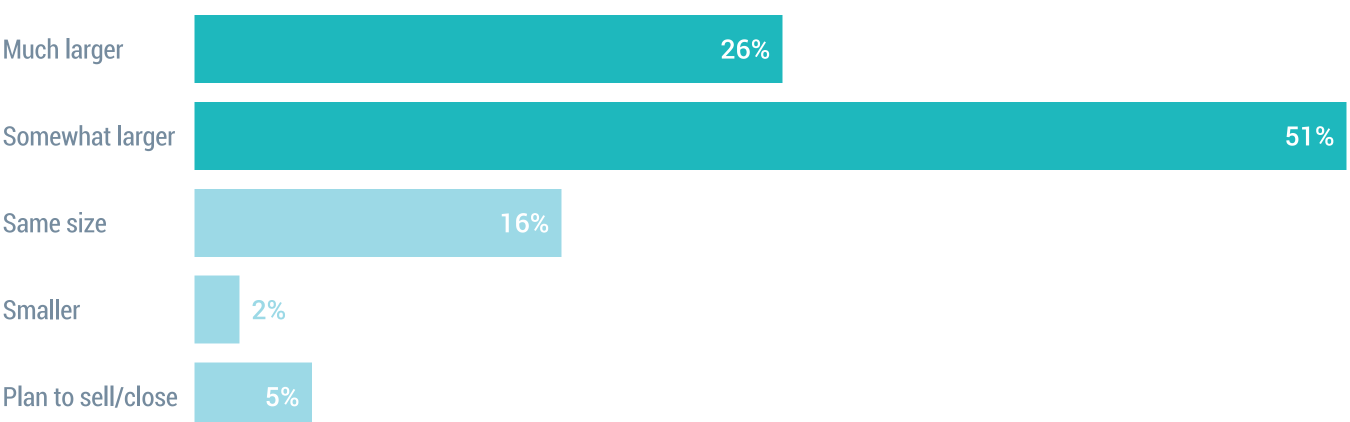
**30%** of employer firms were **growing** as of the end of 2019.

**Growing firms** are defined as those that
- ☑ Increased revenues[1]
- ☑ Increased number of employees[1]
- ☑ Plan to increase or maintain number of employees[2]

N=4,598

## A majority of firms, 77%, prefer for their business to be larger than its current size.

**PREFERENCE FOR FUTURE SIZE OF FIRM** (% of employer firms) N=4,677




1 *Prior 12 months. Approximately the second half of 2018 through the second half of 2019.*
2 *Expected change in approximately the second half of the surveyed year through the second half of the following year.*

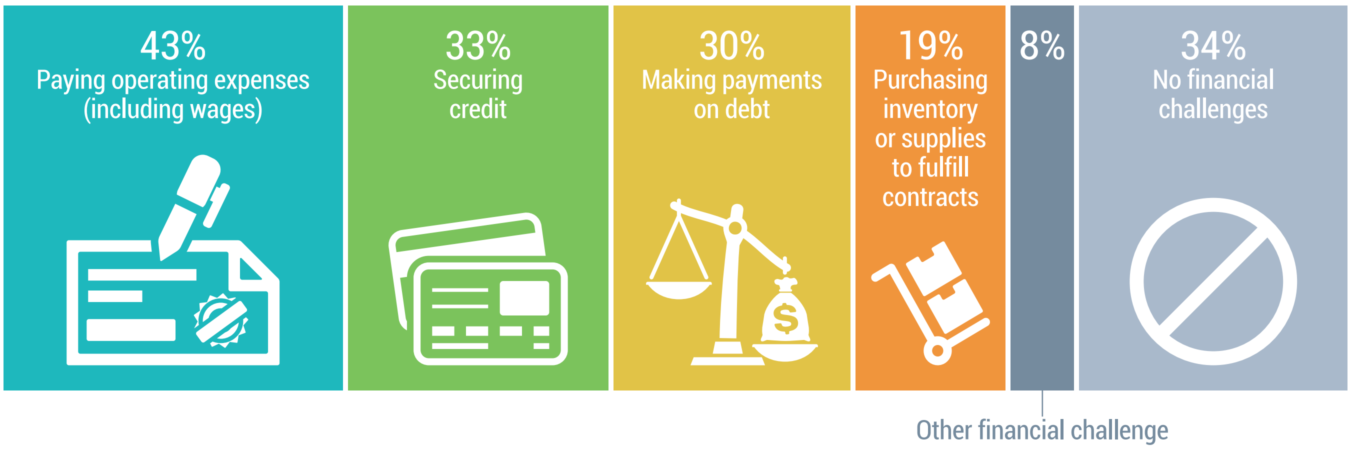

*Source: Small Business Credit Survey, Federal Reserve Banks*

# FINANCIAL CHALLENGES

## 66% of employer firms faced financial challenges in the prior 12 months.[1]

**FINANCIAL CHALLENGES,[2]** *Prior 12 Months*[1]
(% of employer firms)

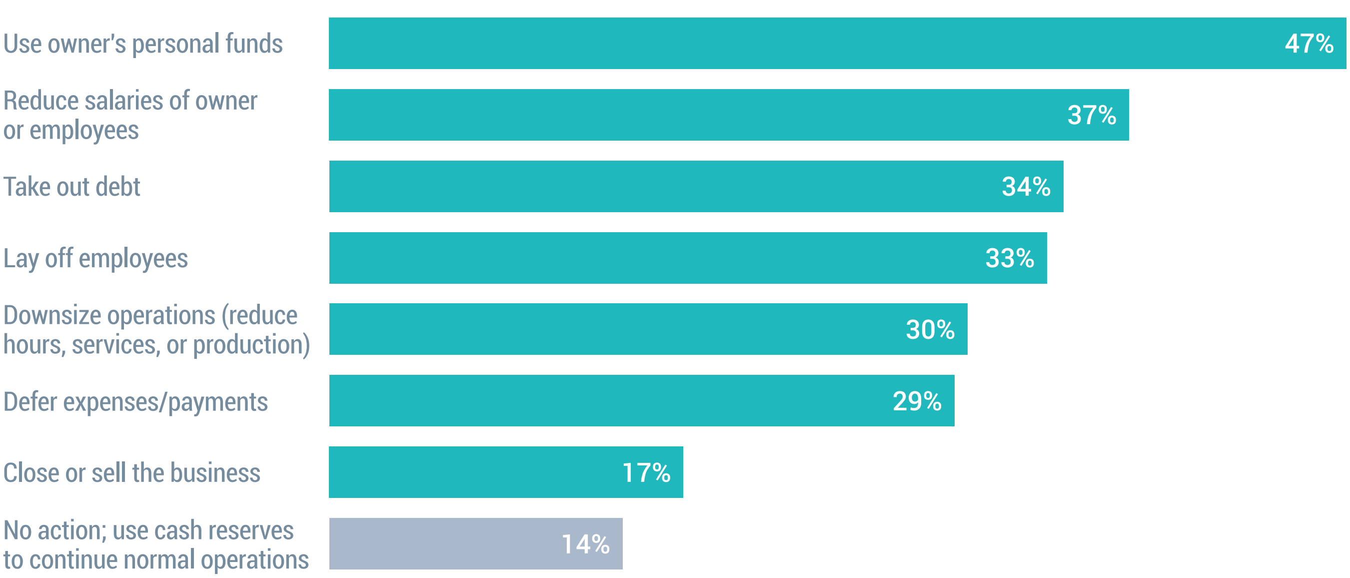
N=6,490




## 17% of firms would have to close if they experienced a two-month revenue loss.

**ACTIONS BUSINESS WOULD TAKE IN RESPONSE TO A 2-MONTH REVENUE LOSS[2]**
(% of employer firms)

N=5,139




1 *Approximately the second half of 2018 through the second half of 2019.*
2 *Respondents could select multiple options.*

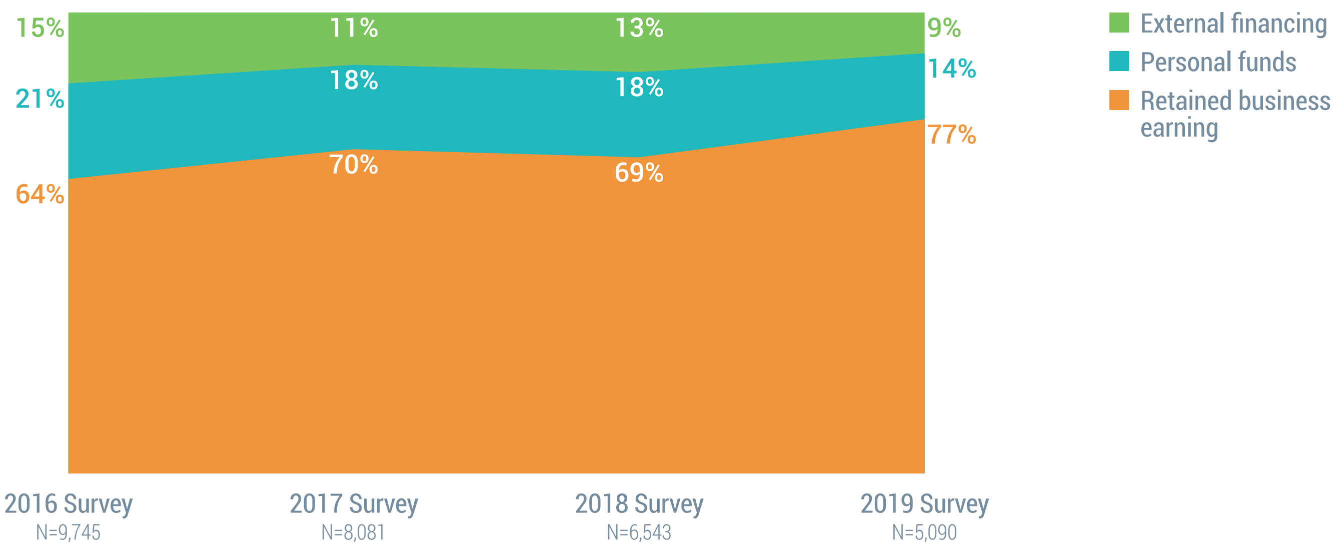


*Source: Small Business Credit Survey, Federal Reserve Banks*

# FUNDING BUSINESS OPERATIONS

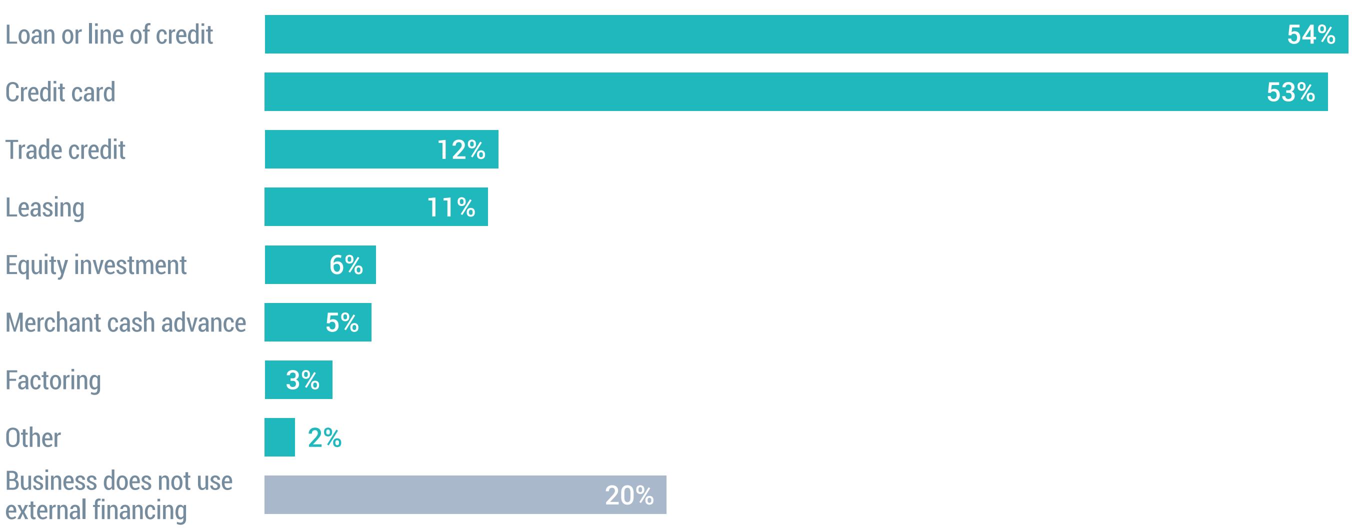
## For 77% of firms, retained business earnings are the primary source of funding.

**PRIMARY FUNDING SOURCE**[1] (% of employer firms)




## Loans, lines of credit, and credit cards are the most common types of external financing used by employer firms.

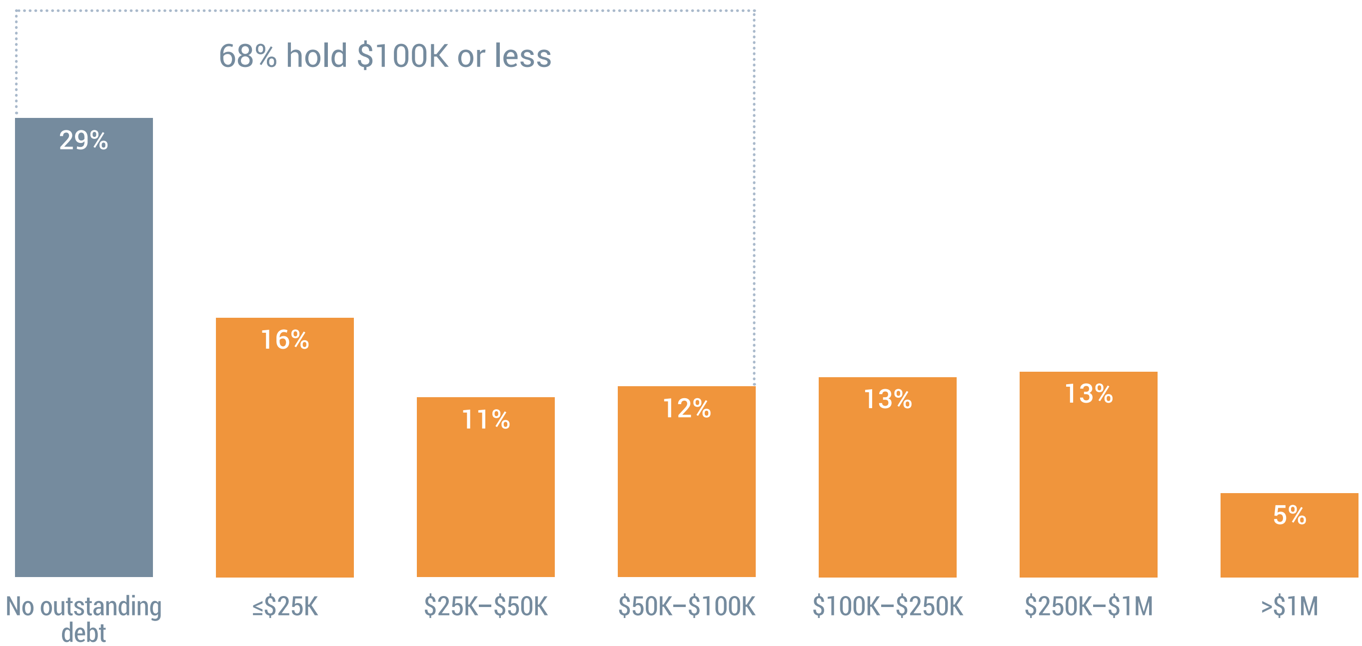
**USE OF FINANCING AND CREDIT,**[2] *Products used on a regular basis* (% of employer firms) N=5,100




1 *Percentages may not sum to 100 due to rounding.*
2 *Respondents could select multiple options.*

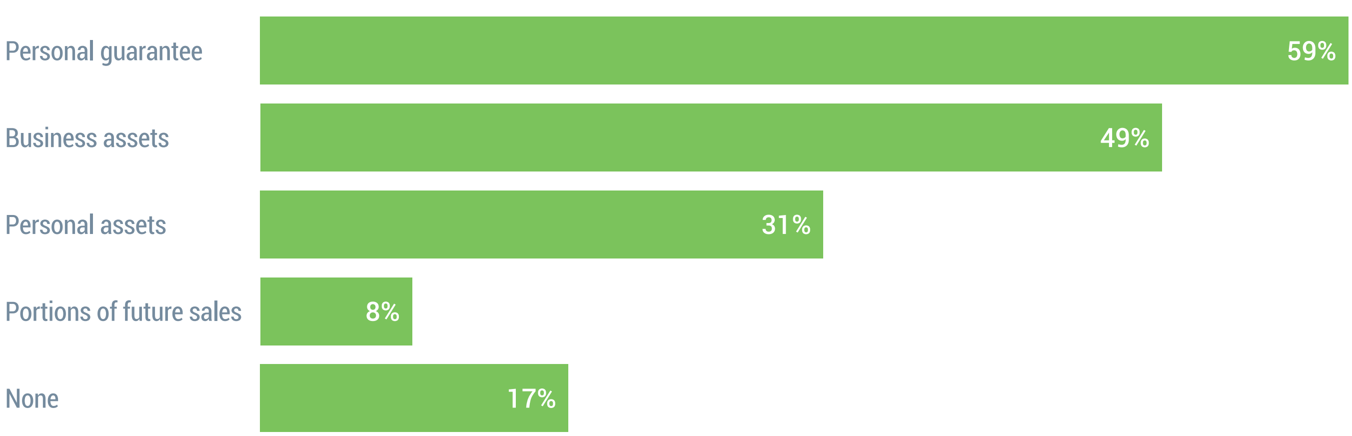
# FUNDING BUSINESS OPERATIONS (CONTINUED)

**AMOUNT OF DEBT,[1,2,3]** *At Time of Survey* (% of employer firms) N=5,063




## A majority of firms with debt used a personal guarantee to secure their debt.

**COLLATERAL USED TO SECURE DEBT[4]** (% of employer firms with debt) N=3,636



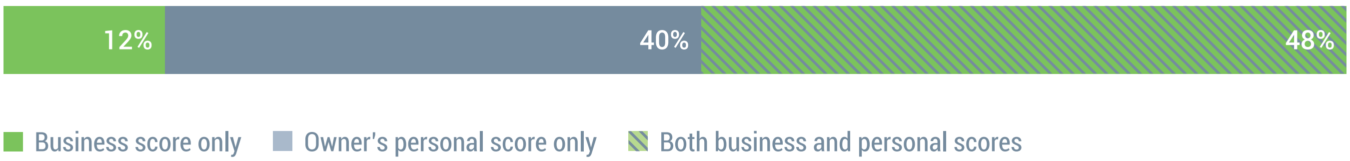

1 *This chart is not comparable to the "Amount of Debt" chart shown in the 2018 Report on Employer Firms because the amount of debt was only shown for employer firms with debt. This chart includes an option for "no outstanding debt" in order to show the amount of debt for all employer firms.*
2 *Categories have been simplified for readability. Actual categories are: ≤$25K, $25,001–$50K, $50,001–$100K, $100,001–$250K, $250,001–$1M, >$1M.*
3 *Percentages may not sum to 100 due to rounding.*
4 *Respondents could select multiple options. Response option "other" not shown in chart. See Appendix for more detail.*



*Source: Small Business Credit Survey, Federal Reserve Banks*

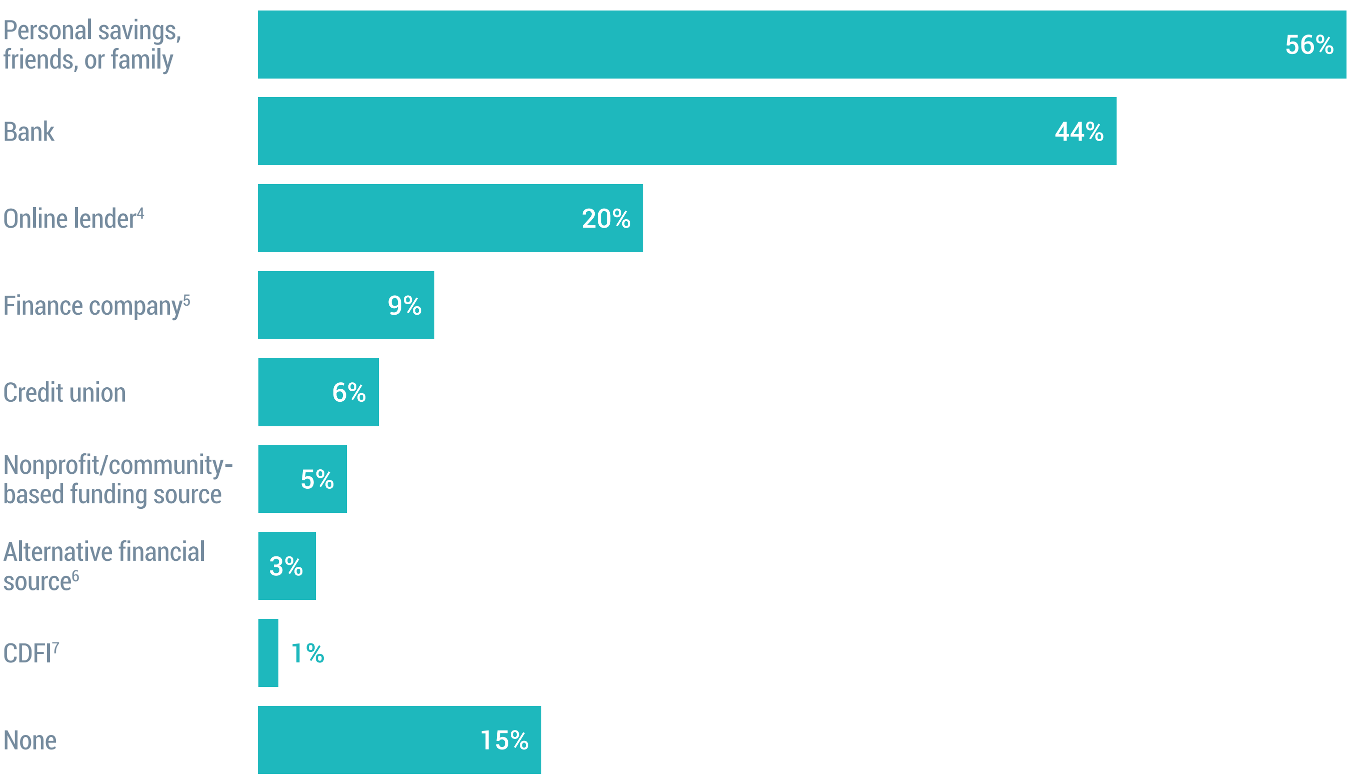
## 88% of employer firms rely on an owner's personal credit score to obtain financing, similar to 2018.

**USE OF PERSONAL AND BUSINESS CREDIT SCORES[1]** (% of employer firms) N=3,696




## 56% of firms have relied on personal savings, friends, or family to fund their business in the last five years.

**FUNDING SOURCES USED IN THE LAST FIVE YEARS[2,3]** (% of employer firms) N=5,148




1 *Percentages may not sum to 100 due to rounding.*
2 *Respondents could select multiple options.*
3 *Response option "other" not shown. See Appendix for details.*
4 *"Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.*
5 *"Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.*
6 *Examples include payday lender, check cashing, pawn shop, money order/transmission service, etc.*
7 *Community development financial institutions (CDFIs) are financial institutions that provide credit and financial services to underserved markets and populations. CDFIs are certified by the CDFI Fund at the U.S. Department of the Treasury.*

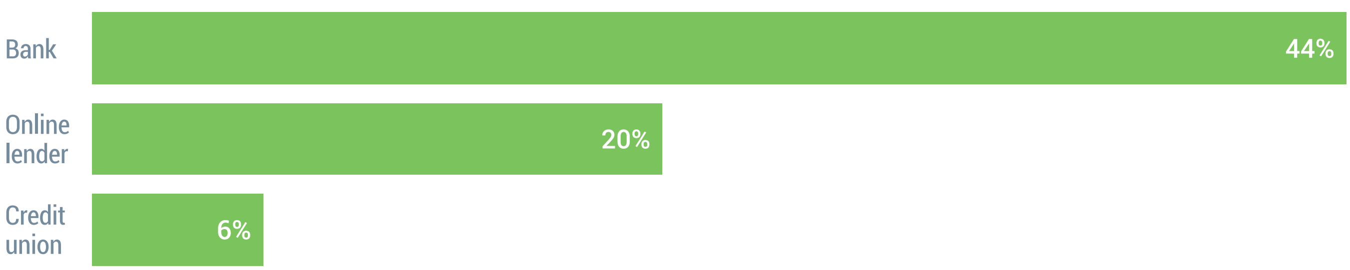


*Source: Small Business Credit Survey, Federal Reserve Banks*

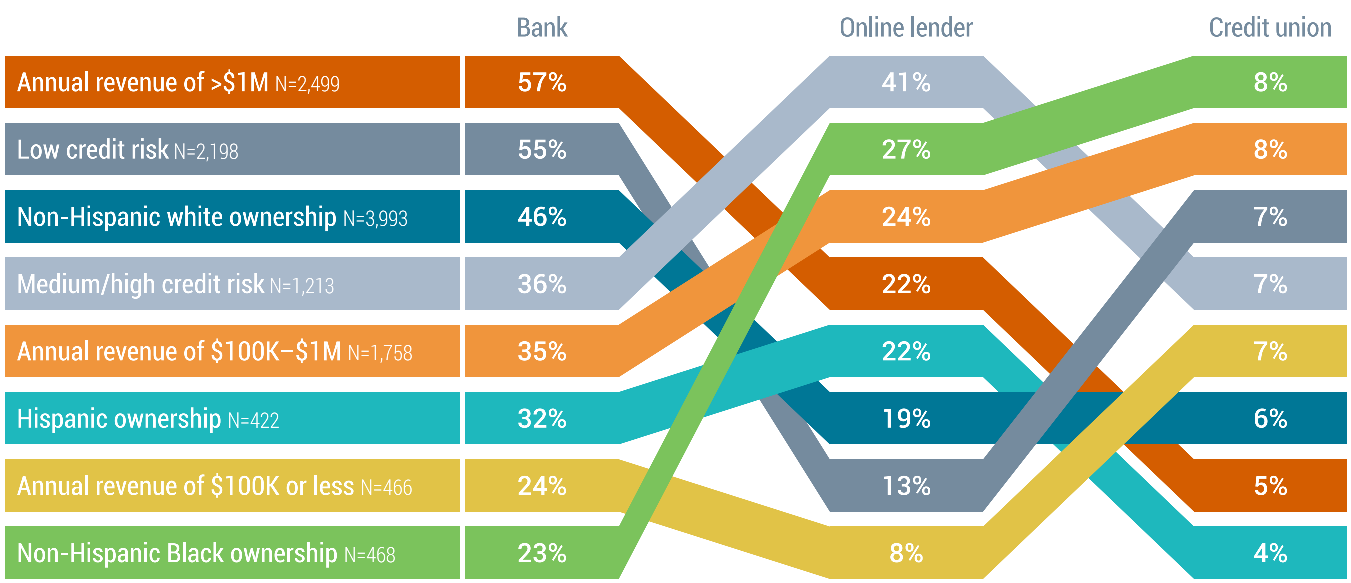
# LENDING RELATIONSHIPS

## 44% of firms have used a bank for funding in the last five years, indicating a prior lending relationship. Banking relationships are more common among larger firms, firms with better credit scores, and firms with white ownership.

**FUNDING SOURCES USED IN THE LAST FIVE YEARS,** *Select Sources* (% of employer firms) N=5,148




**FUNDING SOURCES USED IN THE LAST FIVE YEARS BY DEMOGRAPHIC CHARACTERISTICS,** *Select Sources* (% of employer firms)



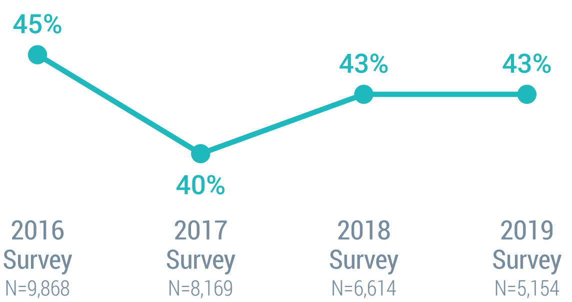



*Source: Small Business Credit Survey, Federal Reserve Banks*

# DEMAND FOR FINANCING

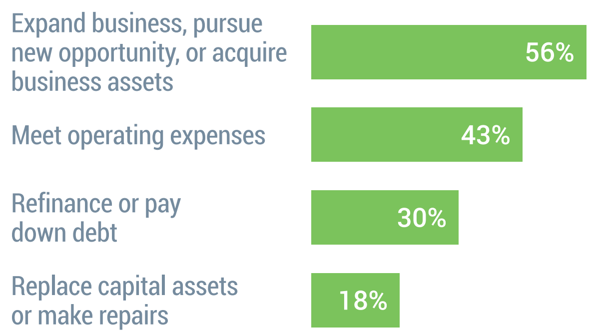
## The share of firms that applied for financing has remained flat since 2018.

### SHARE THAT APPLIED FOR FINANCING, *Prior 12 Months*[1] (% of employer firms)



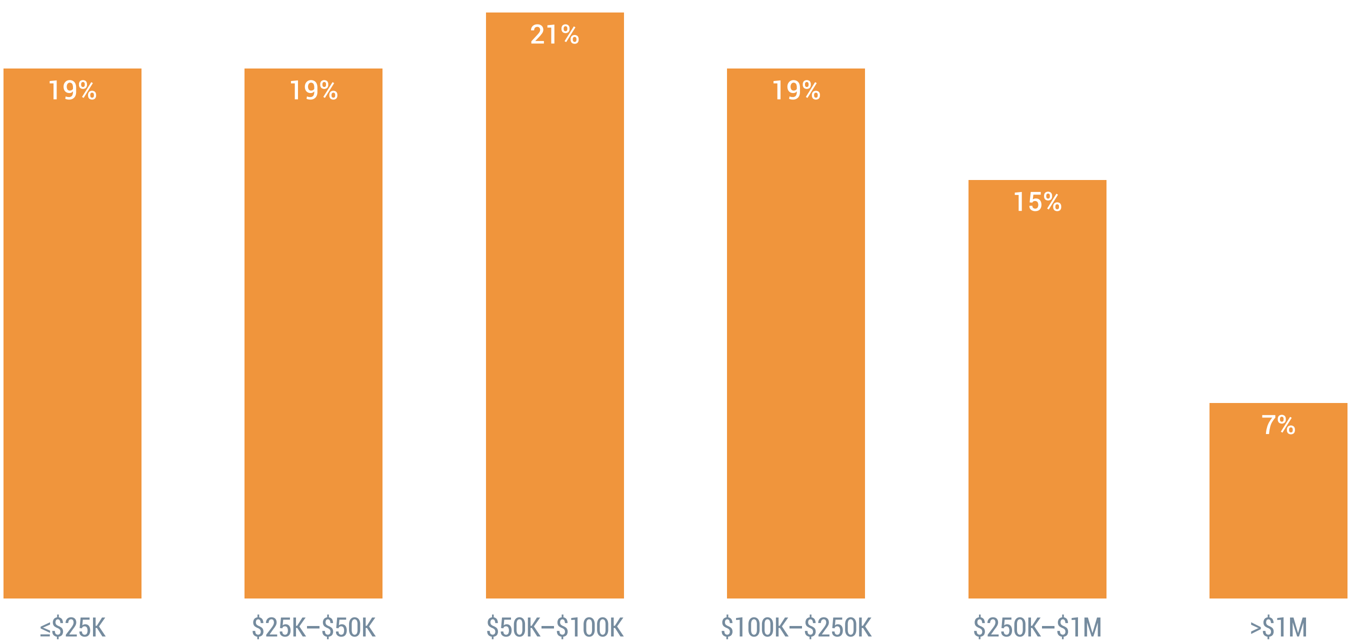

### REASONS FOR APPLYING[2,3] (% of applicants)

N=2,384




### TOTAL AMOUNT OF FINANCING SOUGHT,[4] *Prior 12 Months*[1] (% of applicants)

N=2,374




1 *Approximately the second half of the prior year through the second half of the surveyed year.*
2 *Respondents could select multiple options.*
3 *Response option "other" not shown. See Appendix for details.*
4 *Categories have been simplified for readability. Actual categories are: ≤$25K, $25,001–$50K, $50,001–$100K, $100,001–$250K, $250,001–$1M, >$1M.*

# FINANCING NEEDS AND OUTCOMES

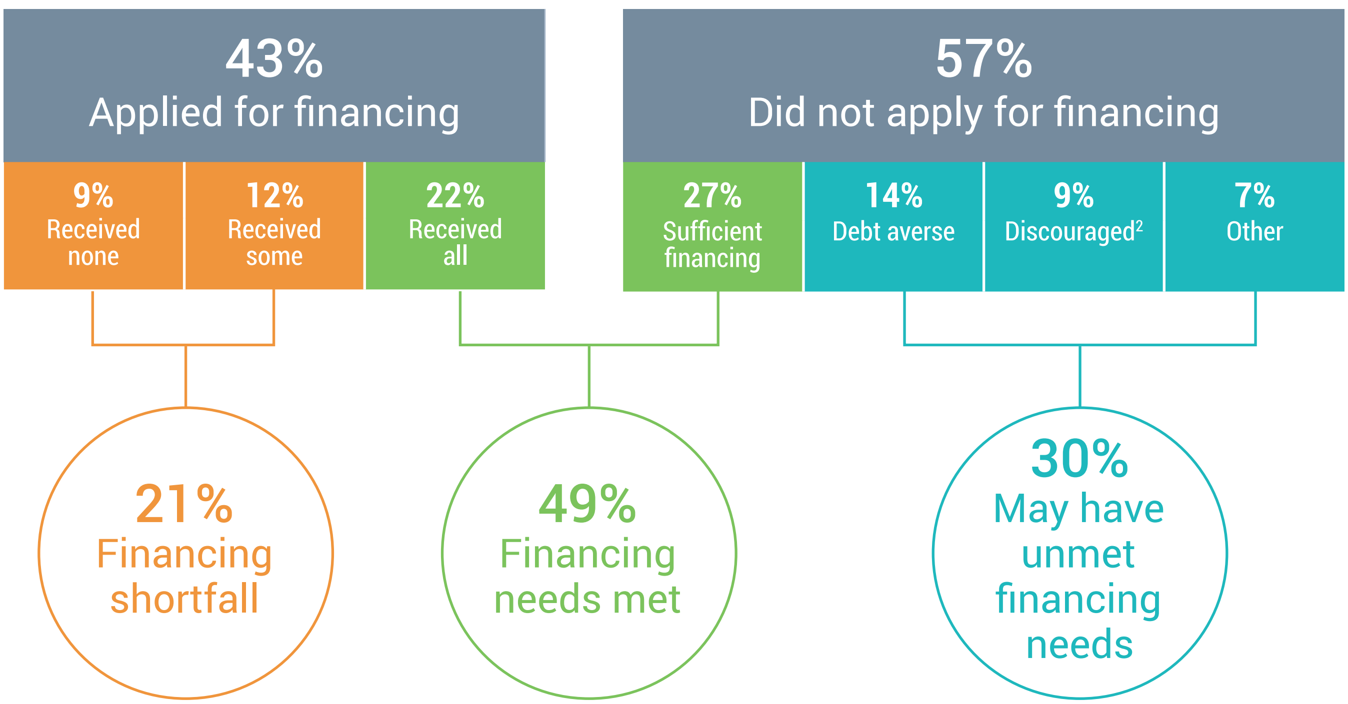
**FUNDING NEEDS AND OUTCOMES**[1] (% of employer firms) N=5,023

To gauge funding success and shortfalls, we combine applicants' financing outcomes and nonapplicants' reasons for not applying. Firms that had their funding needs met emerge in two forms:

1) Applicant firms that received the full amount of financing sought; or

2) Nonapplicant firms that did not apply for financing because they already had sufficient financing.

The remaining firms may or may not have unmet funding needs. When applicant firms did not obtain the full amount of financing sought, we consider them to have a funding shortfall. When nonapplicant firms did not report they had sufficient financings, we consider them to have potentially unmet funding needs.

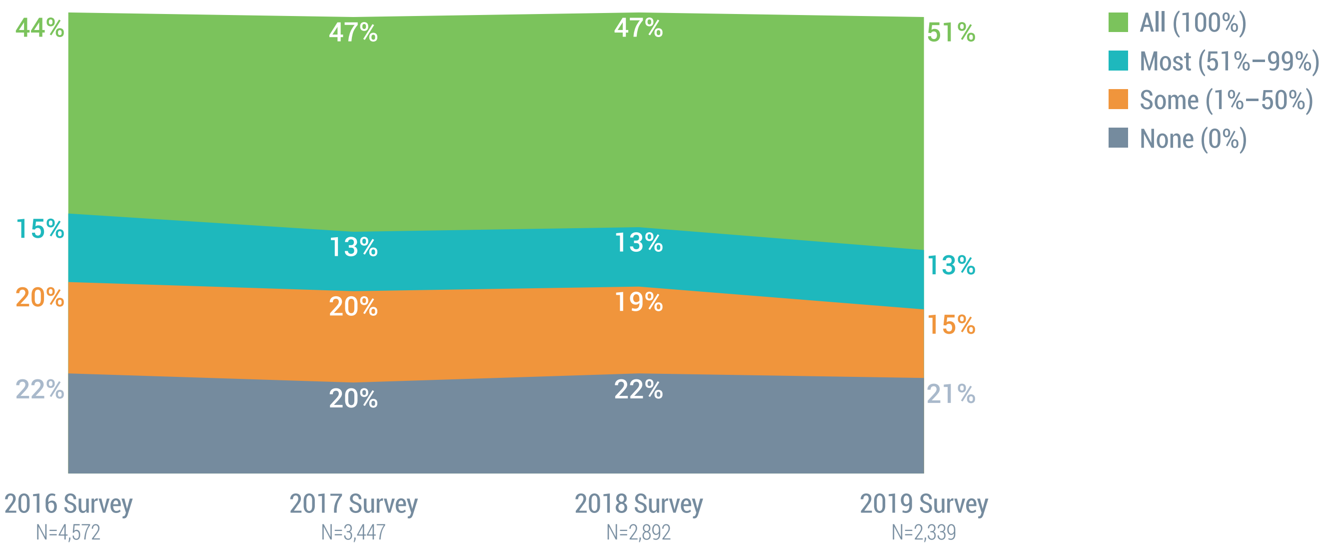



1 Based on the prior 12 months, which is approximately the second half of 2018 through the second half of 2019.
2 Discouraged firms are those that did not apply for financing because they believed they would be turned down.

# FINANCING RECEIVED

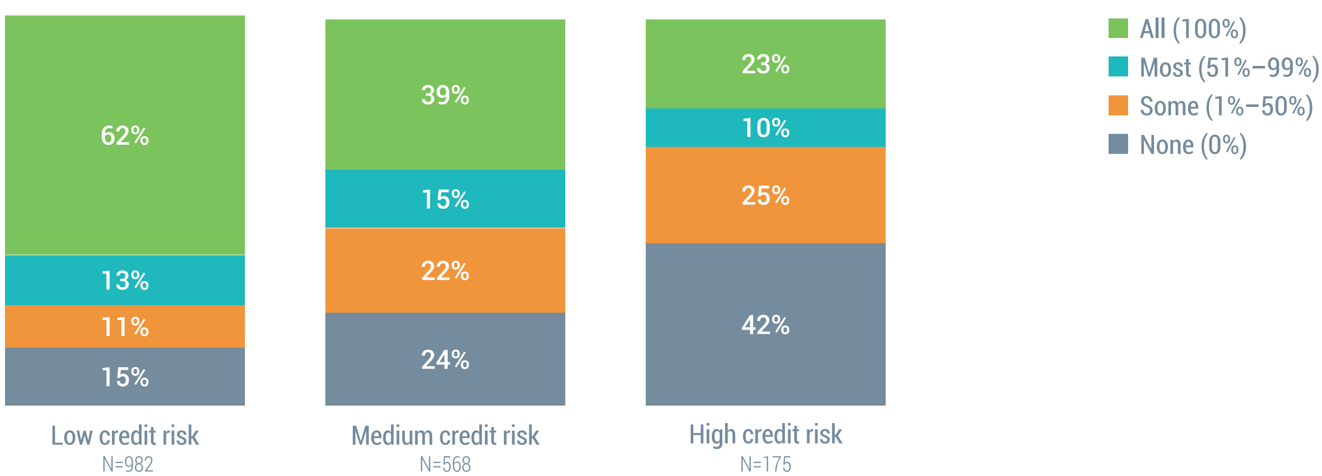
## 51% of employer firms that applied for credit received all the financing they sought.

**TOTAL FINANCING RECEIVED**[1] (% of applicants)




## Low-credit-risk applicants were more likely to obtain all the financing sought, compared to medium- or high-credit-risk applicants.

**FINANCING RECEIVED BY CREDIT RISK OF FIRM**[2] (% of applicants)




1 *Respondents could select multiple options.*
2 *Credit risk is determined by the self-reported business credit score or personal credit score, depending on which is used to obtain financing for their business. If the firm uses both, the higher risk rating is used. "Low credit risk" is a 80–100 business credit score or 720+ personal credit score. "Medium credit risk" is a 50–79 business credit score or a 620–719 personal credit score. "High credit risk" is a 1–49 business credit score or a <620 personal credit score.*

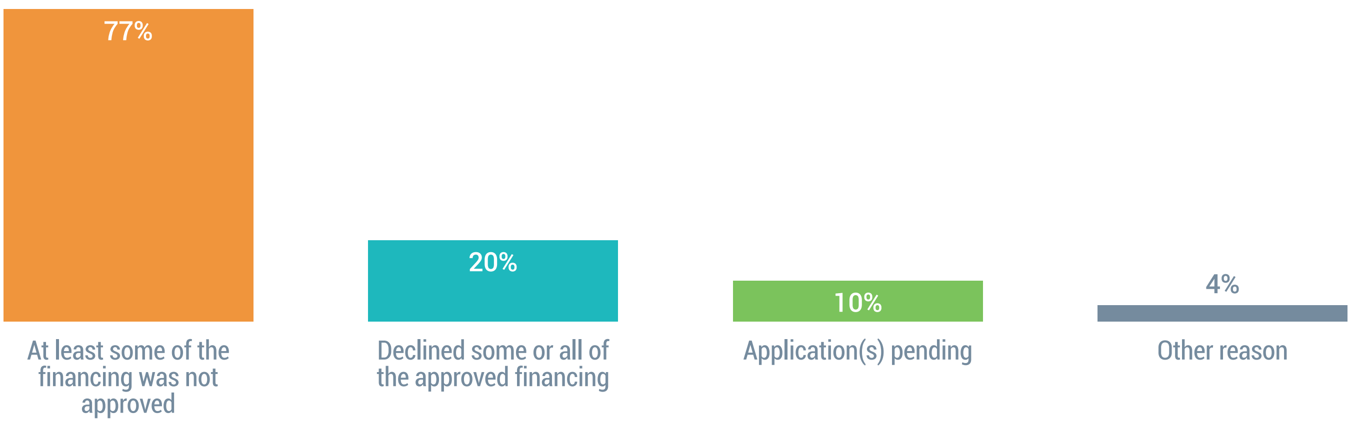

*Source: Small Business Credit Survey, Federal Reserve Banks*

# FINANCING RECEIVED AND SHORTFALLS

## Of the firms that did not receive the full amount of financing sought, 20% indicated that the firm chose to decline some or all of the approved financing—most often because the interest rate was too high.

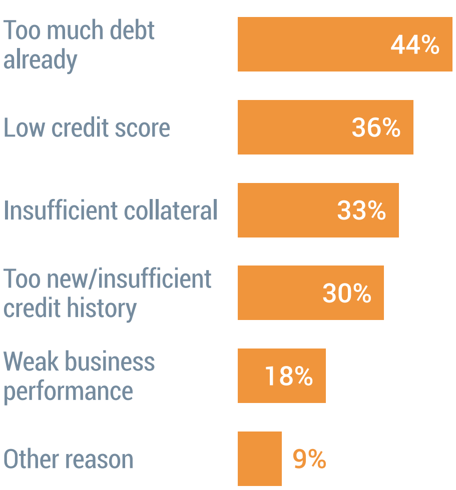
**REASONS FOR OBTAINING LESS THAN THE FULL AMOUNT OF FINANCING SOUGHT[1]** N=1,132

(% of applicants with financing shortfall)



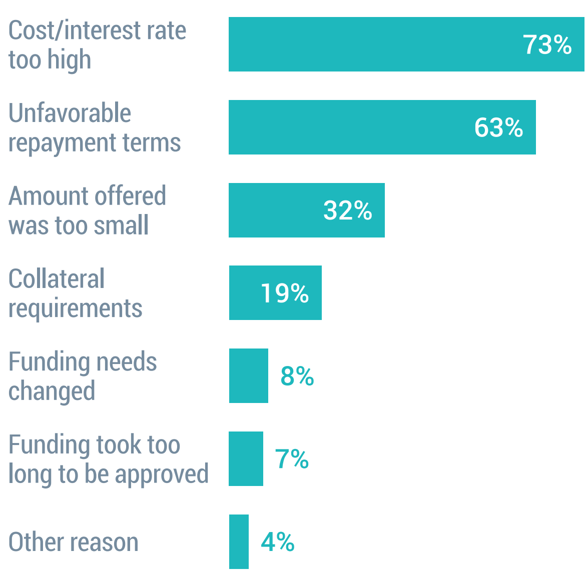

**REASONS FOR CREDIT DENIAL[1]** N=635

(% of applicants that were not approved for at least some financing)




**REASONS FIRM DECLINED APPROVED FUNDING[1]** N=214

(% of applicants that declined approved financing)




1 *Respondents could select multiple options.*

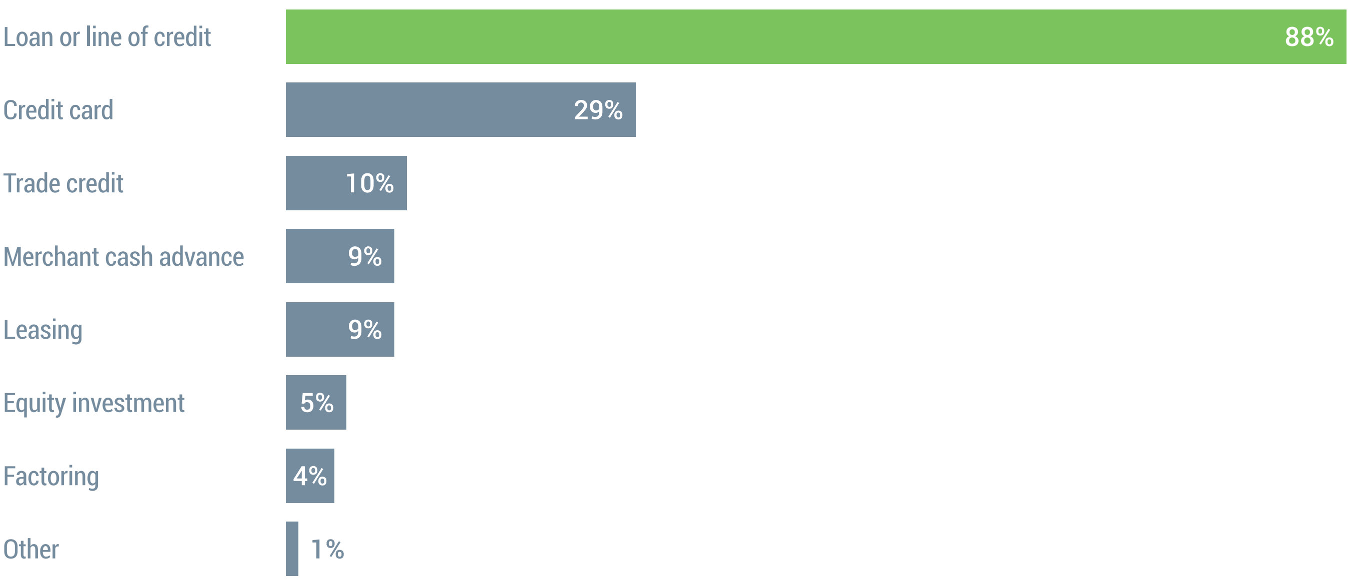


*Source: Small Business Credit Survey, Federal Reserve Banks*

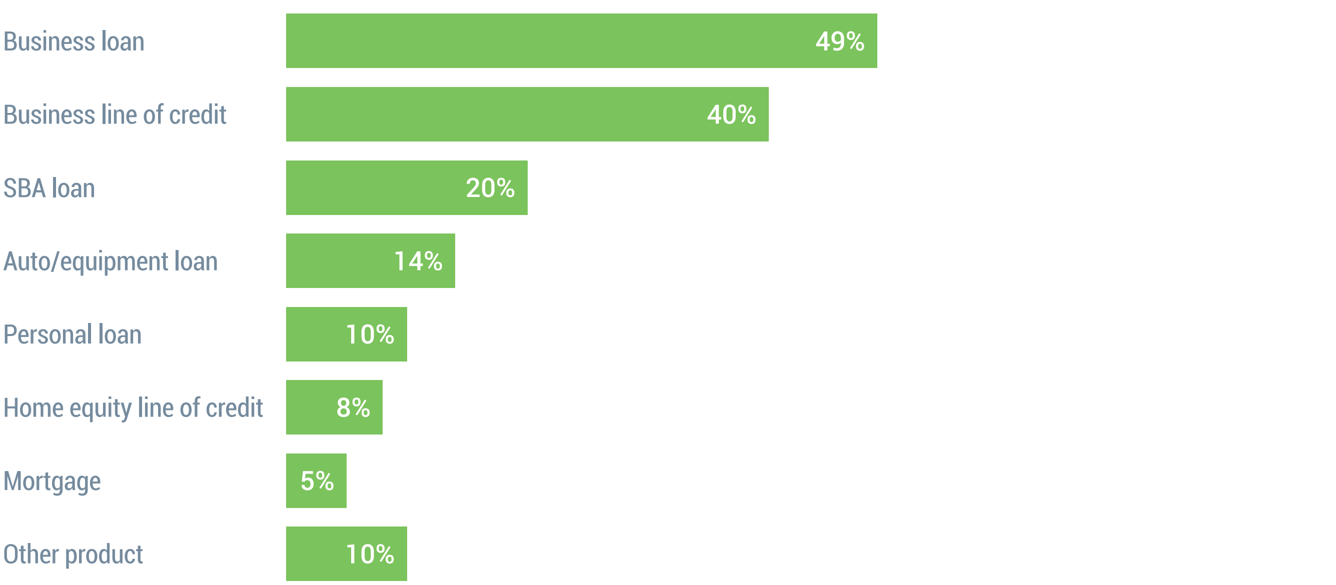
# APPLICATIONS

## Applicants were most often seeking loans or lines of credit.

**FINANCING AND CREDIT PRODUCTS SOUGHT**[1] (% of applicants) N=2,347




**APPLICATION RATE FOR LOANS/LINES OF CREDIT**[1] (% of loan/line of credit applicants) N=1,874

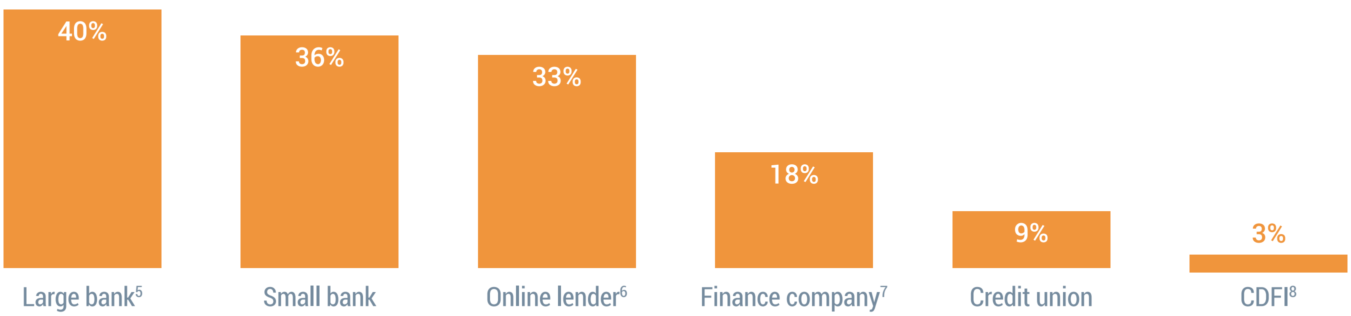



1 *Respondents could select multiple options.*

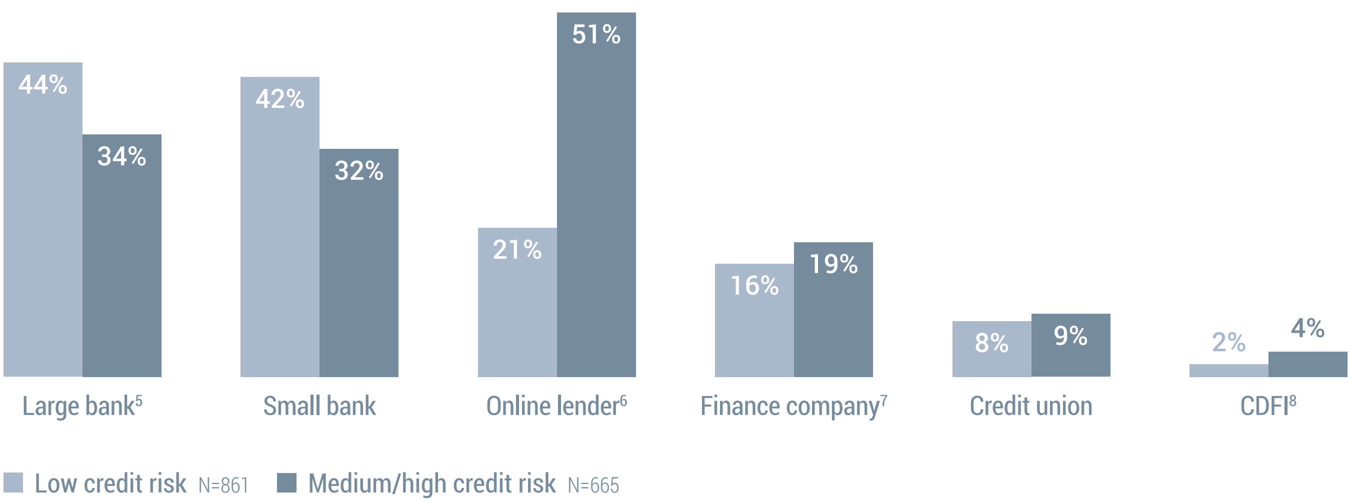
# LOAN/LINE OF CREDIT SOURCES

## Large and small banks receive the most credit applications from small firms. Medium/high-credit-risk applicants, however, were more inclined to apply to online lenders.

**CREDIT SOURCES APPLIED TO**[1,2,3] (% of loan/line of credit and cash advance applicants) N=1,901




**CREDIT SOURCES APPLIED TO BY CREDIT RISK OF FIRM**[1,2,4] (% of loan/line of credit and cash advance applicants)



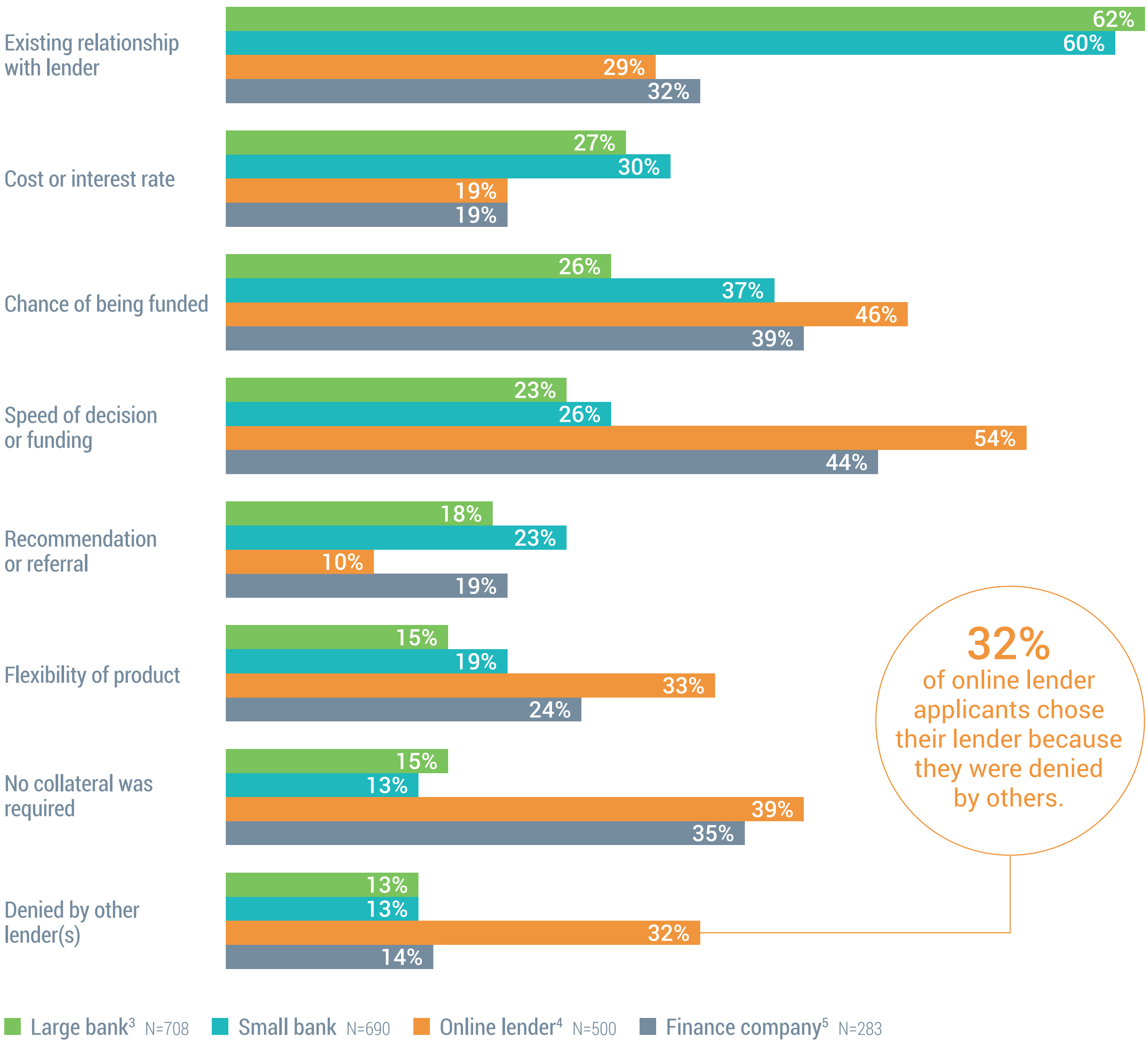

1 *Respondents could select multiple options.*
2 *Due to the addition of the "Finance company" option, source application rates are not comparable to those of previous survey years.*
3 *Respondents who selected "other" were asked to describe the source. They most frequently cited auto/equipment dealers, farm-lending institutions, friends/family/owner, nonprofit organizations, private investors, and government entities.*
4 *Credit risk is determined by the self-reported business credit score or personal credit score, depending on which is used to obtain financing for their business. If the firm uses both, the higher risk rating is used. "Low credit risk" is a 80–100 business credit score or 720+ personal credit score. "Medium credit risk" is a 50–79 business credit score or a 620–719 personal credit score. "High credit risk" is a 1–49 business credit score or a <620 personal credit score.*
5 *Respondents were provided a list of large banks (those with at least $10B in total deposits) operating in their state.*
6 *"Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.*
7 *"Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.*
8 *Community development financial institutions (CDFIs) are financial institutions that provide credit and financial services to underserved markets and populations. CDFIs are certified by the CDFI Fund at the U.S. Department of the Treasury.*

 *Source: Small Business Credit Survey, Federal Reserve Banks*

# LOAN/LINE OF CREDIT SOURCES (CONTINUED)

## Online-lender applicants were more than twice as likely as other applicants to state that denials by other lenders drove their application decisions.

**FACTORS INFLUENCING WHERE FIRMS APPLY[1]** (% of loan/line of credit and cash advance applicants at source)




1 *Respondents could select multiple options.*
2 *Credit union and CDFI categories not included due to insufficient sample size.*
3 *Respondents were provided a list of large banks (those with at least $10B in total deposits) operating in their state*
4 *"Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.*
5 *"Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.*

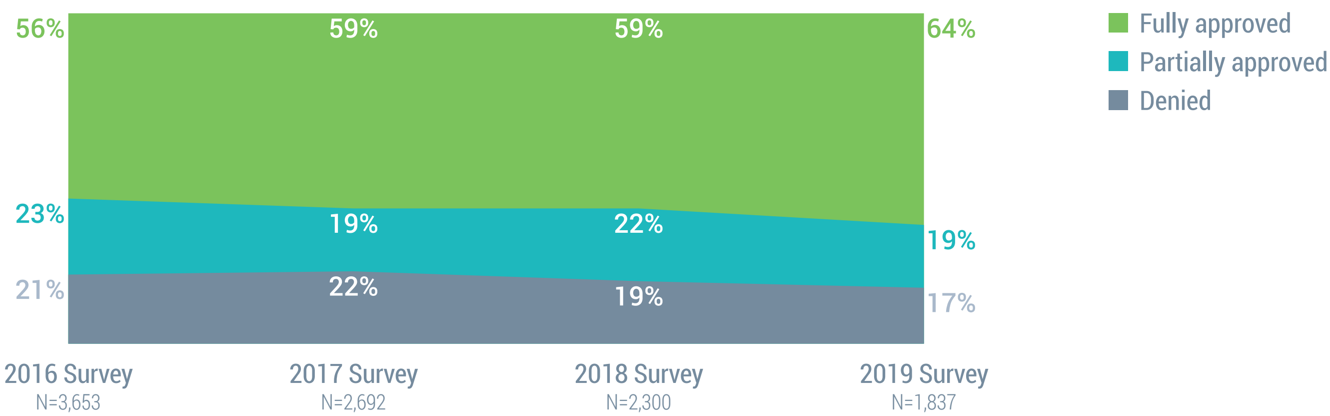
 *Source: Small Business Credit Survey, Federal Reserve Banks* 

# LOAN/LINE OF CREDIT APPROVALS

## Loan/line of credit applicants reported greater success in the 2019 survey than in previous surveys.

### OUTCOMES OF LOAN, LINE OF CREDIT, AND CASH ADVANCE APPLICATIONS

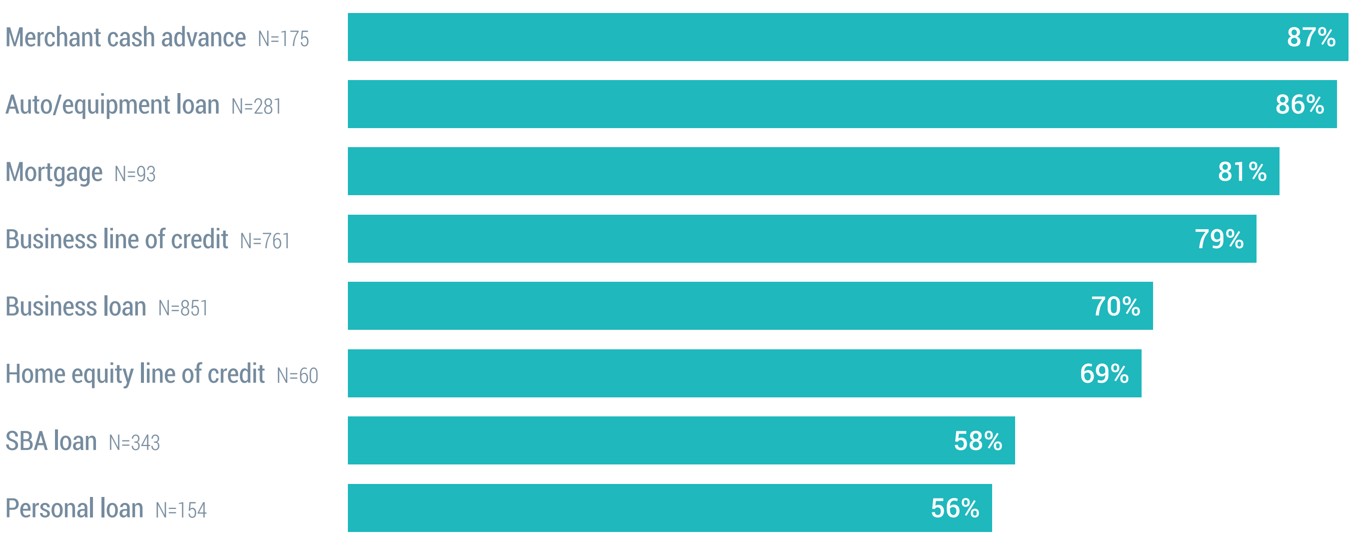
(% of loan/line of credit and cash advance applicants)




## The share of applicants approved for at least some financing is highest for merchant cash advances and auto/equipment loans.

### APPROVAL RATE BY TYPE OF LOAN/LINE OF CREDIT[1,2]

(% of loan/line of credit and cash advance applicants)




1 *Approval rate is the share approved for at least some credit.*
2 *Response option "other" not shown in chart. See Appendix for more detail.*



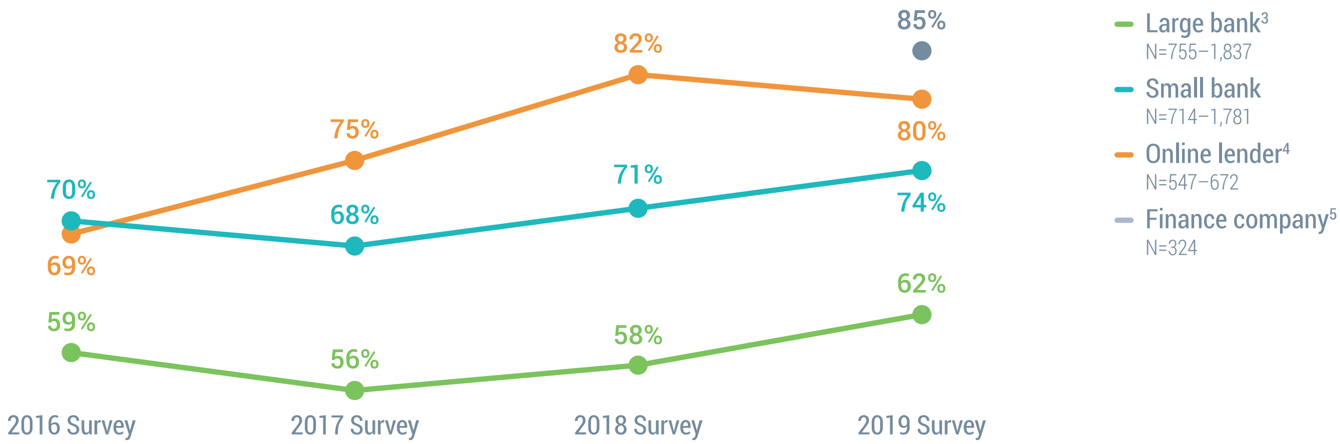
*Source: Small Business Credit Survey, Federal Reserve Banks*

# LOAN/LINE OF CREDIT APPROVALS (CONTINUED)

## Loan/line of credit and cash advance applicants were most often approved at finance companies and online lenders.

### APPROVAL RATE BY SOURCE OF LOAN/LINE OF CREDIT OR CASH ADVANCE[1,2]

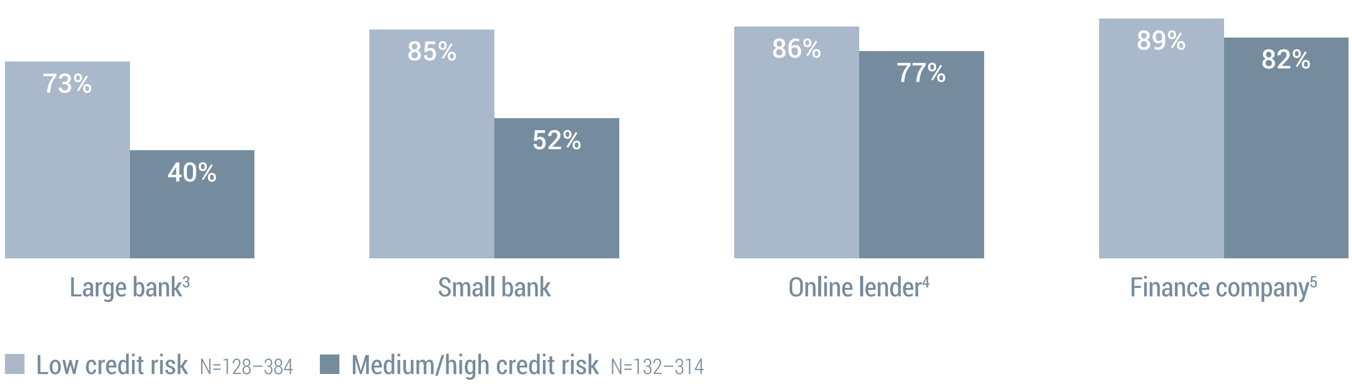
(% of loan/line of credit and cash advance applicants at source)




## Medium/high-credit-risk applicants had greatest success at finance companies and online lenders.

### APPROVAL RATE BY CREDIT RISK OF FIRM AND SOURCE OF LOAN/LINE OF CREDIT OR CASH ADVANCE[1,2,6]

(% of loan/line of credit and cash advance applicants at source)




1 Credit union and CDFI categories not included due to insufficient sample size.
2 Approval rate is the share approved for at least some credit.
3 Respondents were provided a list of large banks (those with at least $10B in total deposits) operating in their state.
4 "Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.
5 "Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.
6 Credit risk is determined by the self-reported business credit score or personal credit score, depending on which is used to obtain financing for their business. If the firm uses both, the higher risk rating is used. "Low credit risk" is a 80–100 business credit score or 720+ personal credit score. "Medium credit risk" is a 50–79 business credit score or a 620–719 personal credit score. "High credit risk" is a 1–49 business credit score or a <620 personal credit score.

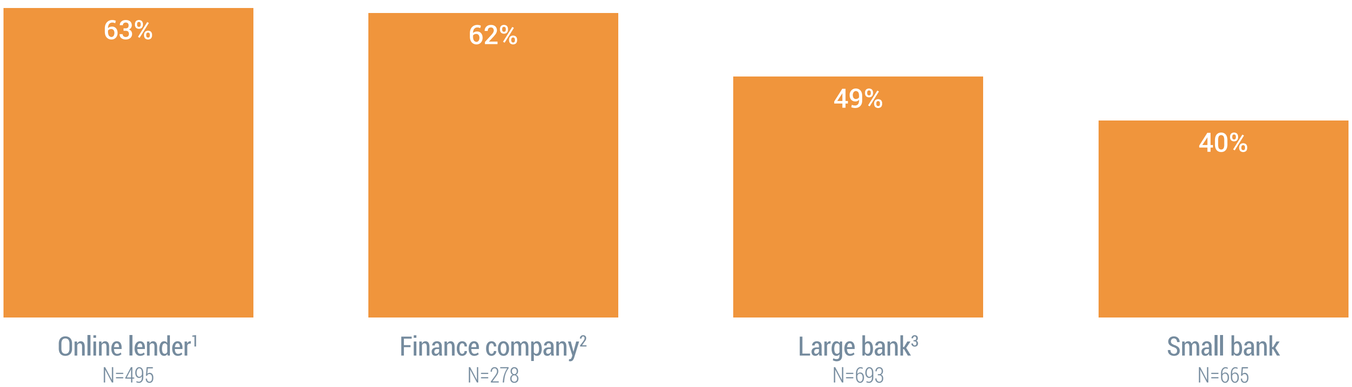


Source: Small Business Credit Survey, Federal Reserve Banks

## Bank applicants were most dissatisfied with wait times for credit decisions. Online-lender and finance-company applicants were most dissatisfied with high interest rates.

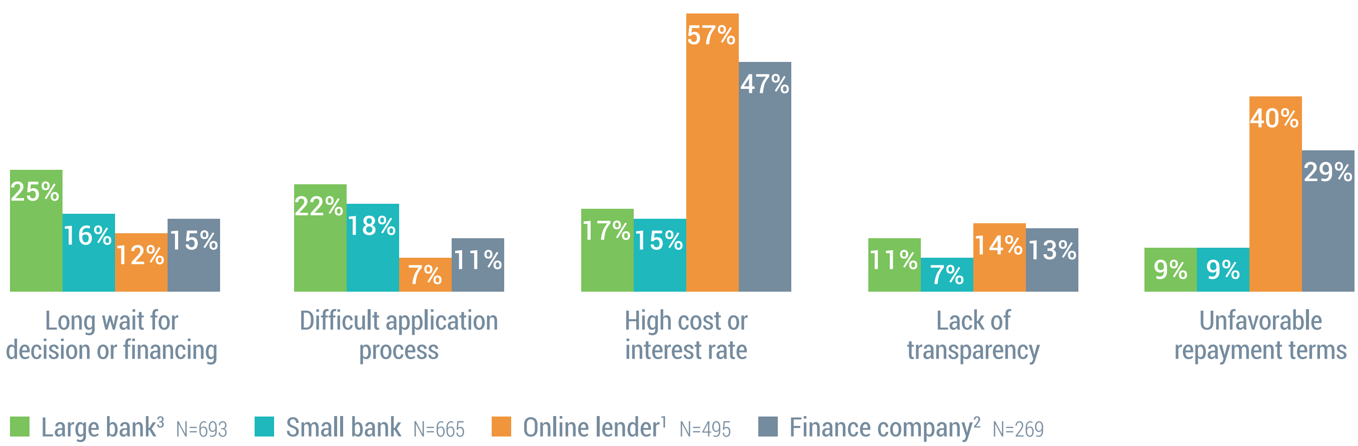
### SHARE OF APPLICANTS WITH CHALLENGES AT SOURCE

(% of loan/line of credit and cash advance applicants at source)




### CHALLENGES WITH LENDERS, *Select Lenders*[4]

(% of loan/line of credit and cash advance applicants at source)




1 *"Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.*
2 *"Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.*
3 *Respondents were provided a list of large banks (those with at least $10B in total deposits) operating in their state.*
4 *Respondents could select multiple options.*

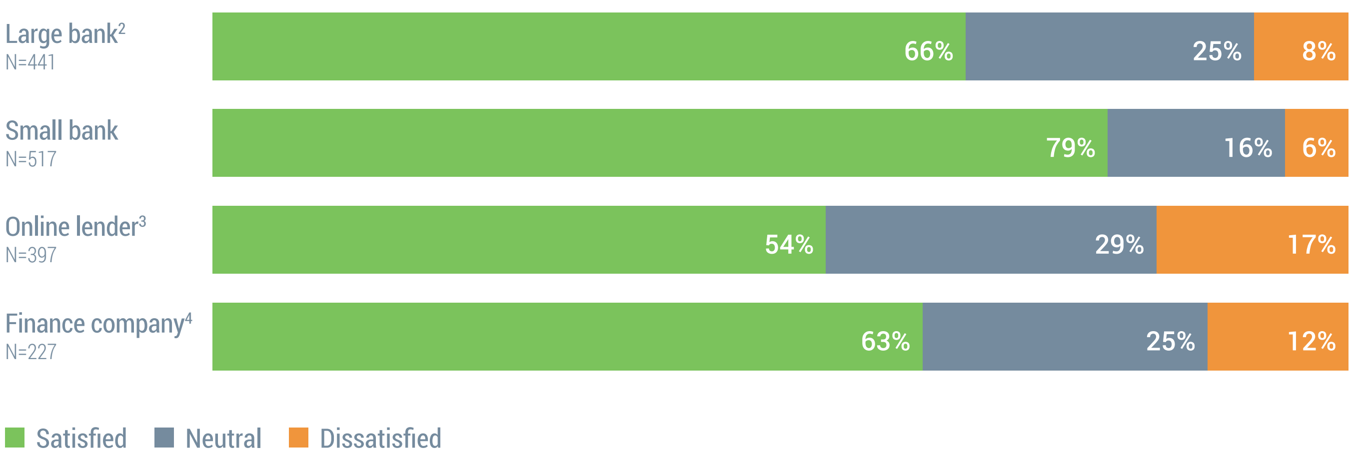


*Source: Small Business Credit Survey, Federal Reserve Banks*

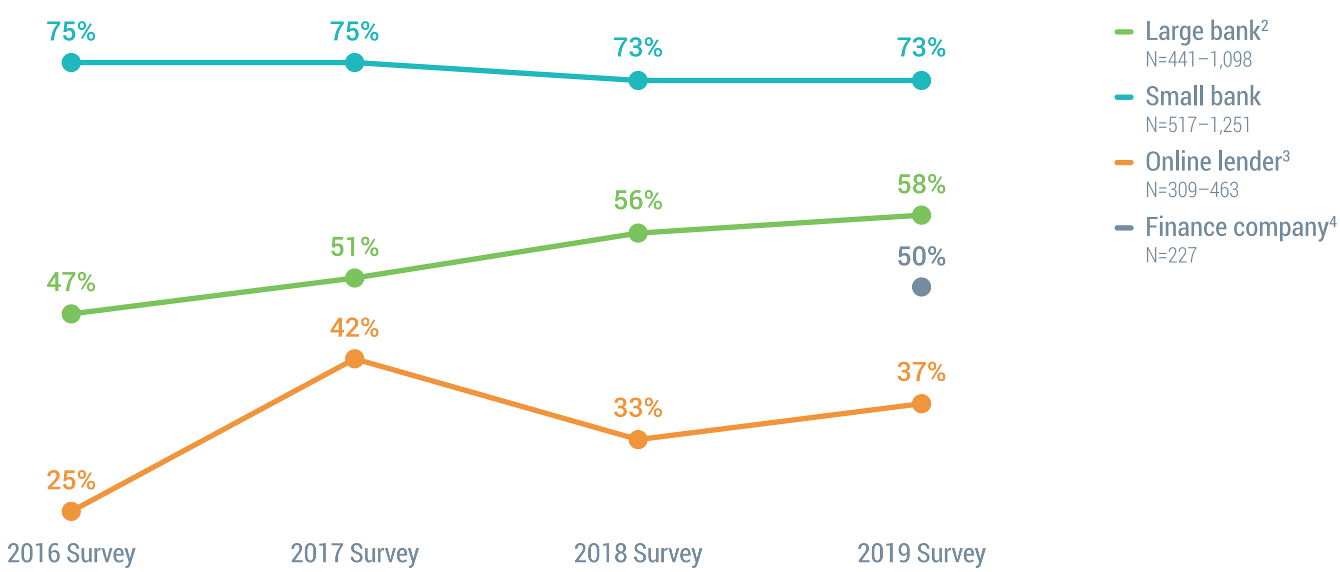
# APPLICANT SATISFACTION

## Applicant satisfaction is consistently highest at small banks.

**LENDER SATISFACTION**[1] (% of applicants at least partially approved at source)




**NET SATISFACTION OVER TIME**[5] (% of approved loan/line of credit and cash advance applicants at source)



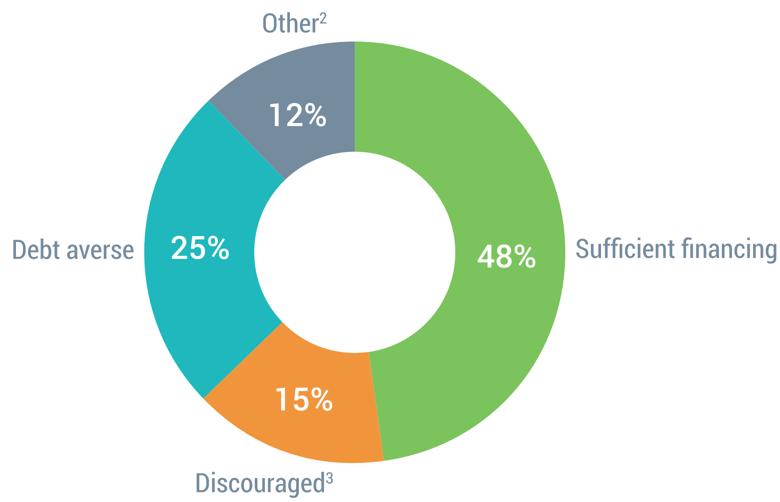

1 *Percentages may not sum to 100 due to rounding.*
2 *Respondents were provided a list of large banks (those with at least $10B in total deposits) operating in their state.*
3 *"Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.*
4 *"Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc. Data for prior years are not available because "finance company" was not included as a discrete answer choice.*
5 *Net satisfaction is the share of firms satisfied minus the share of firms dissatisfied.*

 *Source: Small Business Credit Survey, Federal Reserve Banks*

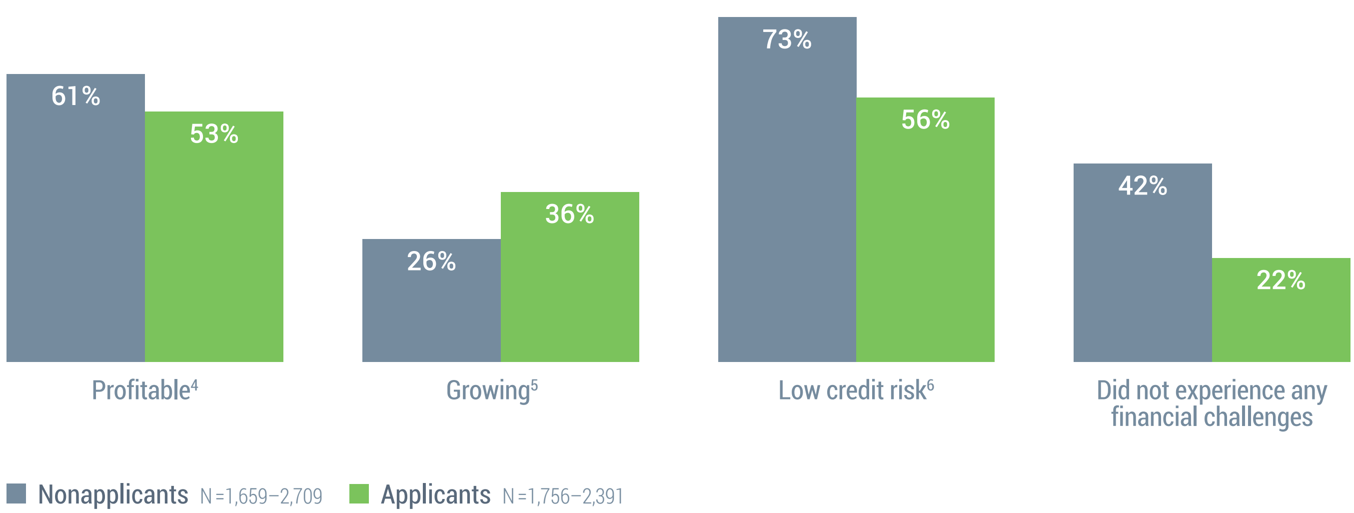
# NONAPPLICANTS

## 57% of firms are nonapplicants, meaning they did not apply for financing in the prior 12 months.[1]

**TOP REASON FOR NOT APPLYING** (% of nonapplicants) N=2,684




**PERFORMANCE OF NONAPPLICANTS AND APPLICANTS** (% of nonapplicants and applicants)




1 *Approximately the second half of 2018 through the second half of 2019.*
2 *Response option "other" includes "credit cost was too high," "application process was too difficult or confusing," and "other." See Appendix for more detail.*
3 *Discouraged firms are those that did not apply for financing because they believed they would be turned down.*
4 *At the end of 2018.*
5 *Firms that increased revenues and employees in the prior 12 months and that plan to increase or maintain their number of employees.*
6 *Credit risk is determined by the self-reported business credit score or personal credit score, depending on which is used to obtain financing for their business. If the firm uses both, the higher risk rating is used. "Low credit risk" is a 80–100 business credit score or 720+ personal credit score. "Medium credit risk" is a 50–79 business credit score or a 620–719 personal credit score. "High credit risk" is a 1–49 business credit score or a <620 personal credit score.*

 *Source: Small Business Credit Survey, Federal Reserve Banks*

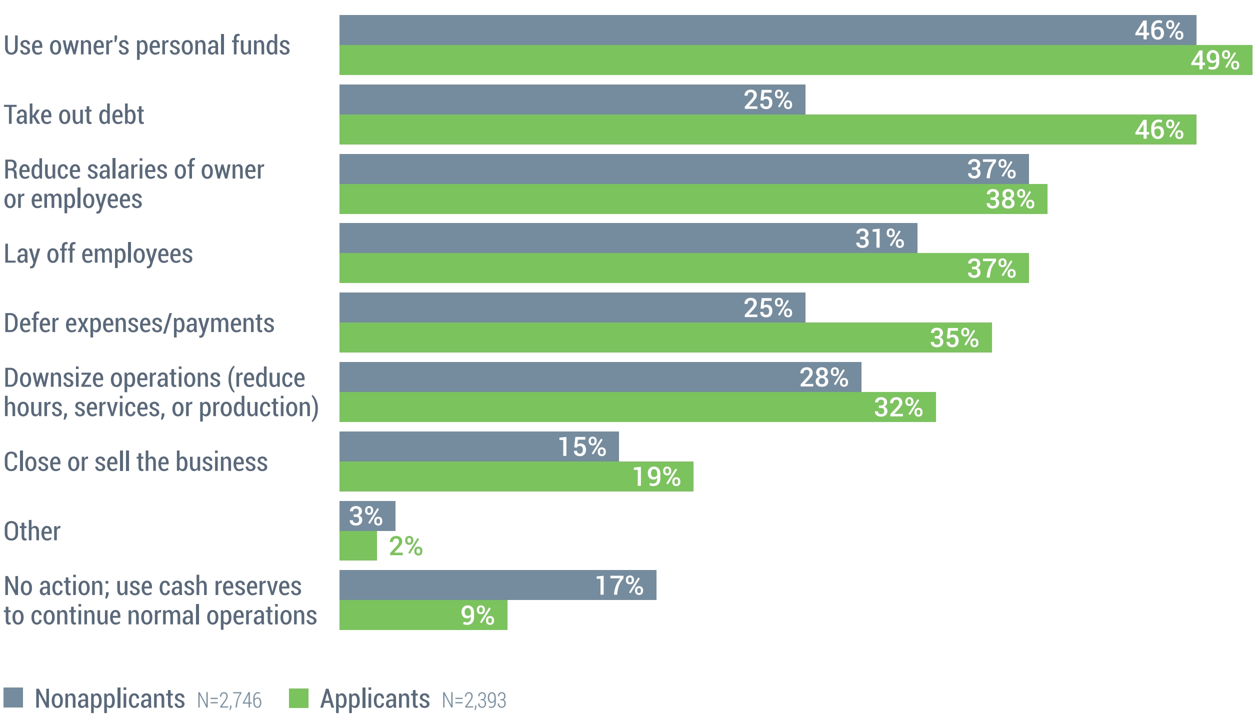
# FINANCIAL CHALLENGES: NONAPPLICANTS AND APPLICANTS

## 59% of nonapplicants experienced financial challenges in the prior 12 months.

**TYPES OF FINANCIAL CHALLENGES,[1]** *Prior 12 Months*[2] (% of nonapplicants and applicants)


## If faced with a hypothetical two-month revenue loss, applicants were much more likely to say they would take out debt to deal with the loss compared to nonapplicants.

**ACTIONS BUSINESS WOULD TAKE IN RESPONSE TO A 2-MONTH REVENUE LOSS[1]** (% of nonapplicants and applicants)




1 *Respondents could select multiple options.*
2 *Approximately the second half of 2018 through the second half of 2019.*

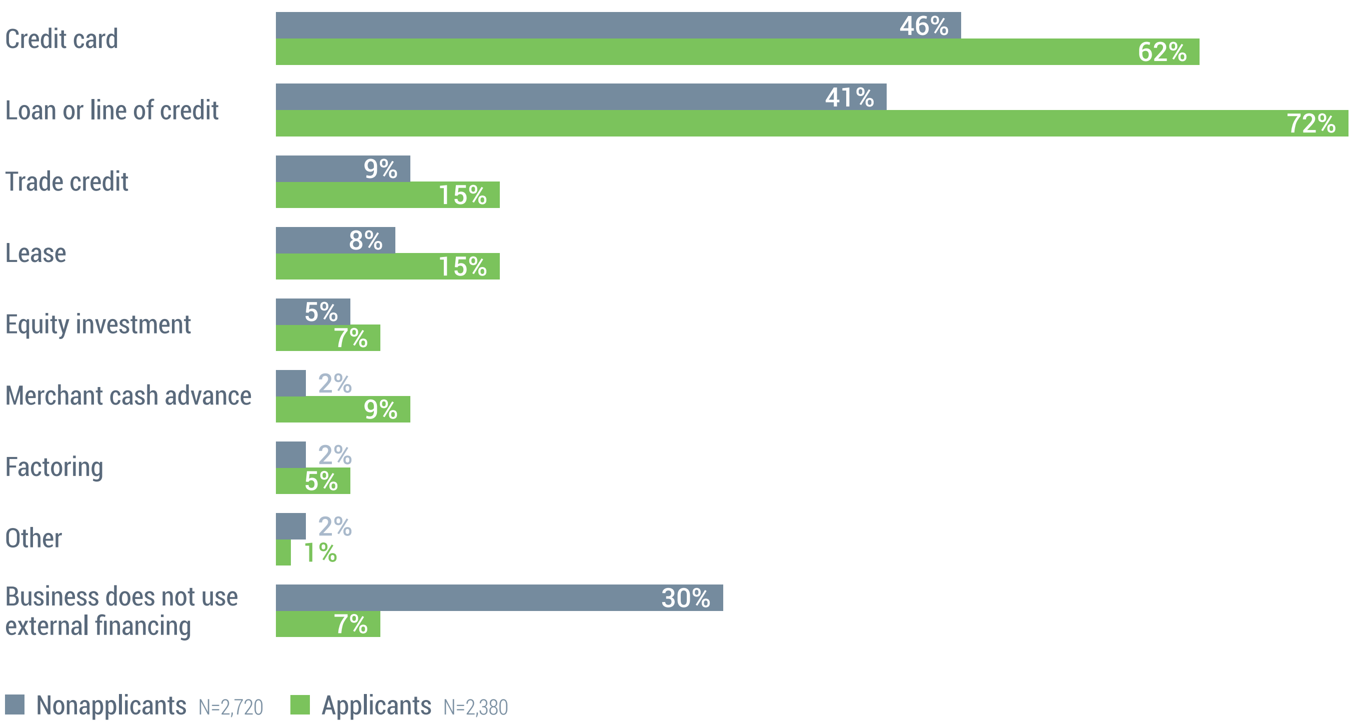


*Source: Small Business Credit Survey, Federal Reserve Banks*

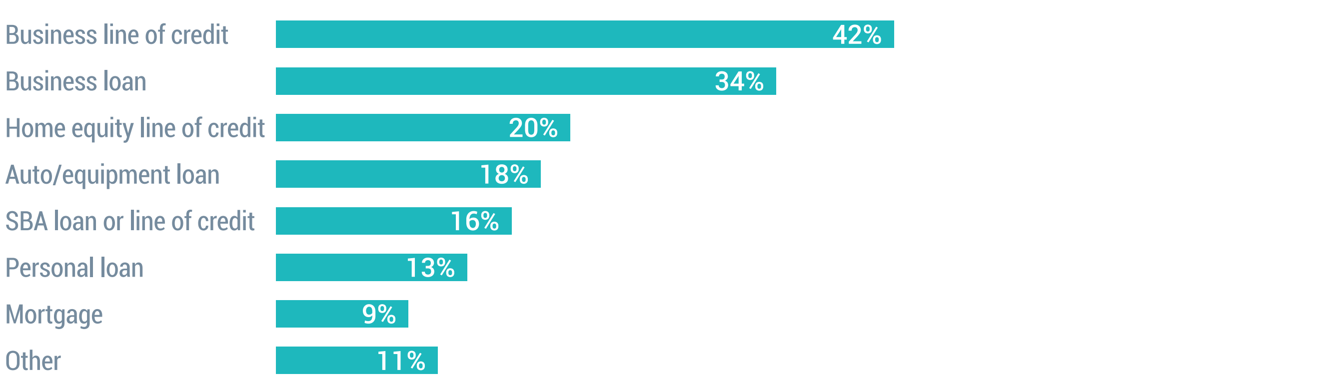
# NONAPPLICANT USE OF FINANCING AND CREDIT

## 70% of nonapplicants regularly use external financing. Many regularly use credit cards or loans/lines of credit.

**USE OF FINANCING AND CREDIT,**[1] *Products used on a regular basis* (% of nonapplicants and applicants)




**LOAN/LINE OF CREDIT PRODUCTS HELD BY NONAPPLICANTS**[1] (% of nonapplicants with loan/line of credit) N=1,116




1 *Respondents could select multiple options.*



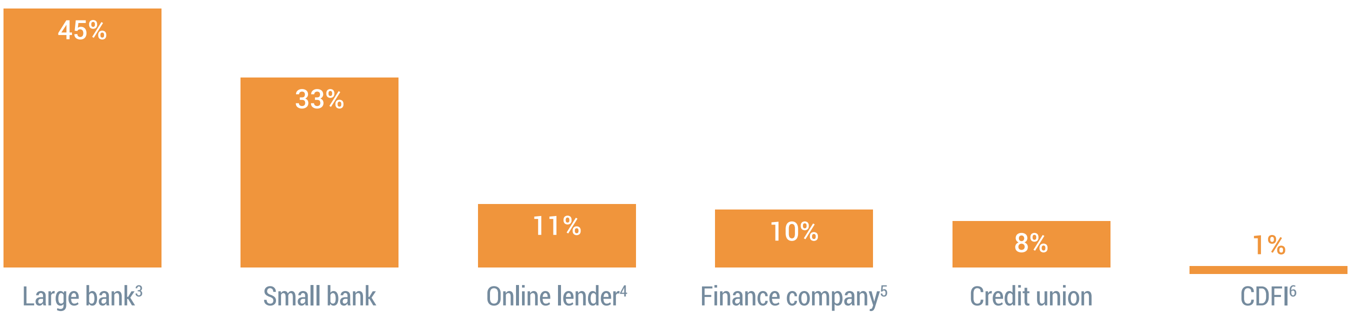
*Source: Small Business Credit Survey, Federal Reserve Banks*

# NONAPPLICANT LOAN/LINE OF CREDIT SOURCES

## Banks are the most common source of credit for nonapplicant firms that regularly use loan/line of credit or cash advance products.

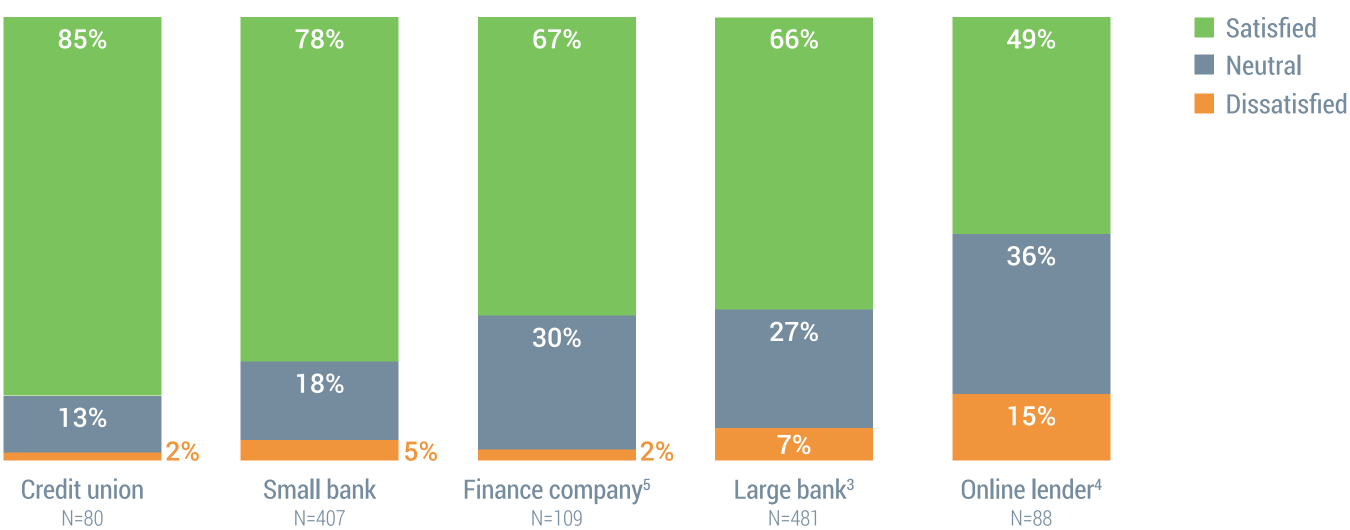
**SOURCES OF LOANS, LINES OF CREDIT, AND CASH ADVANCES[1,2]** N=1,110

(% of nonapplicants that regularly use loan/line of credit or cash advance products from lender)




## Like recent applicants, nonapplicants with debt were most often satisfied with their experiences at smaller lenders, including small banks and credit unions.

**BORROWER SATISFACTION[7]** (% of nonapplicants that regularly use loan/line of credit or cash advance products from lender)




1 *Respondents could select multiple options.*
2 *Response option "other" not shown in chart. See Appendix for more detail.*
3 *Respondents were provided a list of large banks (those with at least $10B in total deposits) operating in their state.*
4 *"Online lenders" are defined as nonbank alternative and marketplace lenders, including Lending Club, OnDeck, CAN Capital, Kabbage, and PayPal Working Capital.*
5 *"Finance company" includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.*
6 *Community development financial institutions (CDFIs) are financial institutions that provide credit and financial services to underserved markets and populations. CDFIs are certified by the CDFI Fund at the U.S. Department of the Treasury.*
7 *Response option "CDFI" not shown due to insufficient sample size. Percentages may not sum to 100 due to rounding.*

# U.S. SMALL EMPLOYER FIRM DEMOGRAPHICS

## SNAPSHOT VIEW OF U.S. SMALL EMPLOYER FIRMS

| CENSUS DIVISION[1] | |
|---|---|
| South Atlantic | 20% |
| Pacific | 17% |
| East North Central | 14% |
| Middle Atlantic | 14% |
| West South Central | 11% |
| Mountain | 8% |
| West North Central | 7% |
| New England | 5% |
| East South Central | 5% |

| GEOGRAPHIC LOCATION[2,3] | |
|---|---|
| Urban | 84% |
| Rural | 16% |

| CREDIT RISK[1,4] | |
|---|---|
| Low credit risk | 65% |
| Medium credit risk | 28% |
| High credit risk | 8% |

| FIRM AGE[1,2] | |
|---|---|
| 0–2 years | 20% |
| 3–5 years | 13% |
| 6–10 years | 20% |
| 11–15 years | 14% |
| 16–20 years | 9% |
| 21+ years | 23% |

| NUMBER OF EMPLOYEES[2,5] | |
|---|---|
| 1–4 | 55% |
| 5–9 | 18% |
| 10–19 | 13% |
| 20–49 | 9% |
| 50–499 | 5% |
| *Share using contractors* | 39% |

| RACE/ETHNICITY[2] | |
|---|---|
| Non-minority | 82% |
| Minority | 18% |

| REVENUE SIZE OF FIRM[1] | |
|---|---|
| ≤$100K | 19% |
| $100K–$1M | 52% |
| $1M–10M | 25% |
| >$10M | 4% |

| GENDER[1,2] | |
|---|---|
| Men-owned | 65% |
| Women-owned | 21% |
| Equally owned | 15% |

| AGE OF FIRM'S PRIMARY DECISION MAKER | |
|---|---|
| Under 36 | 7% |
| 36–45 | 18% |
| 46–55 | 29% |
| 56–65 | 30% |
| Over 65 | 16% |

| INDUSTRY[1,2,6] | |
|---|---|
| Professional services and real estate | 20% |
| Non-manufacturing goods production and associated services | 18% |
| Business support and consumer services | 15% |
| Retail | 14% |
| Healthcare and education | 13% |
| Leisure and hospitality | 11% |
| Finance and insurance | 6% |
| Manufacturing | 4% |

1 *Percentages may not sum to 100 due to rounding.*
2 *SBCS responses throughout the report are weighted using Census data to represent the US small business population on the following dimensions: firm age, size, industry, geography, race/ethnicity of owner, and gender of owner. For details on weighting, see Methodology.*
3 *Urban and rural definitions come from Centers for Medicare & Medicaid Services. See Appendix for more detail.*
4 *Credit risk is determined by the self-reported business credit score or personal credit score, depending on which is used to obtain financing for their business. If the firm uses both, the higher risk rating is used. "Low credit risk" is a 80–100 business credit score or 720+ personal credit score. "Medium credit risk" is a 50–79 business credit score or a 620–719 personal credit score. "High credit risk" is a 1–49 business credit score or a <620 personal credit score.*
5 *Employer firms are those that reported having at least one full- or part-time employee. Does not include self-employed or firms where the owner is the only employee.*
6 *Firm industry is classified based on the description of what the business does, as provided by the survey participant. See Appendix for definitions of each industry.*

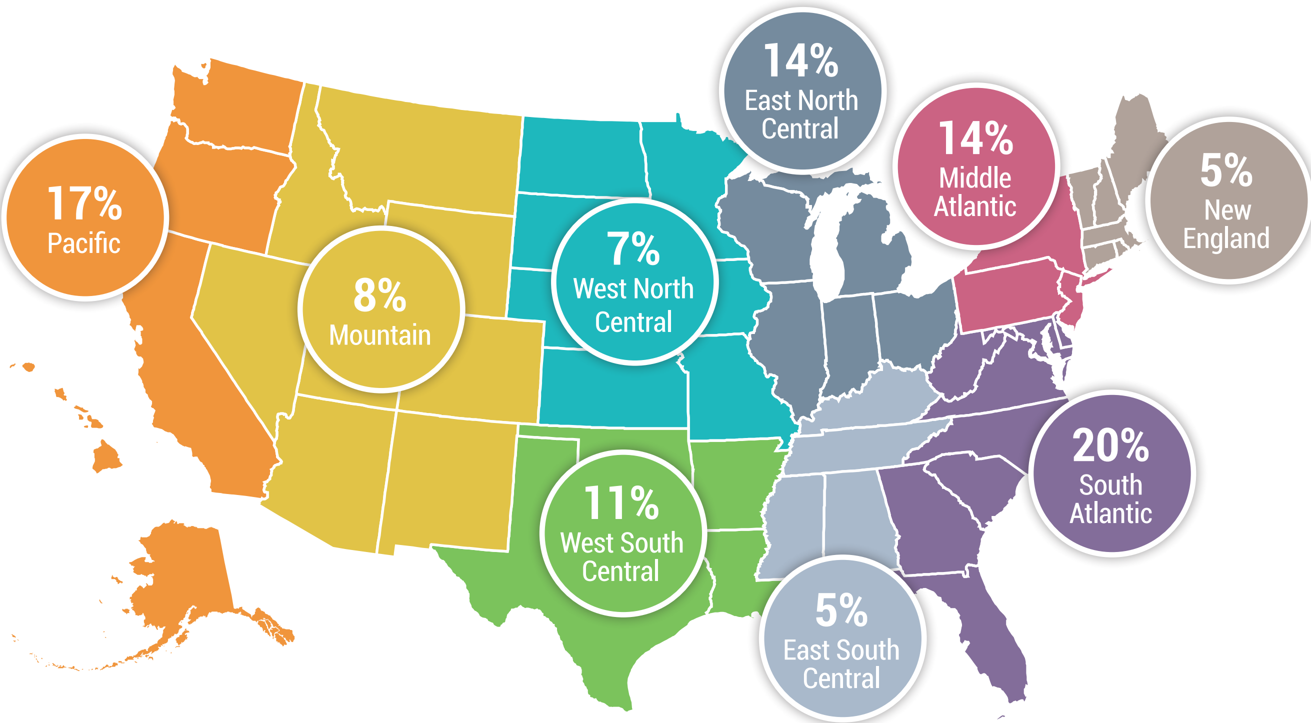


*Source: Small Business Credit Survey, Federal Reserve Banks*

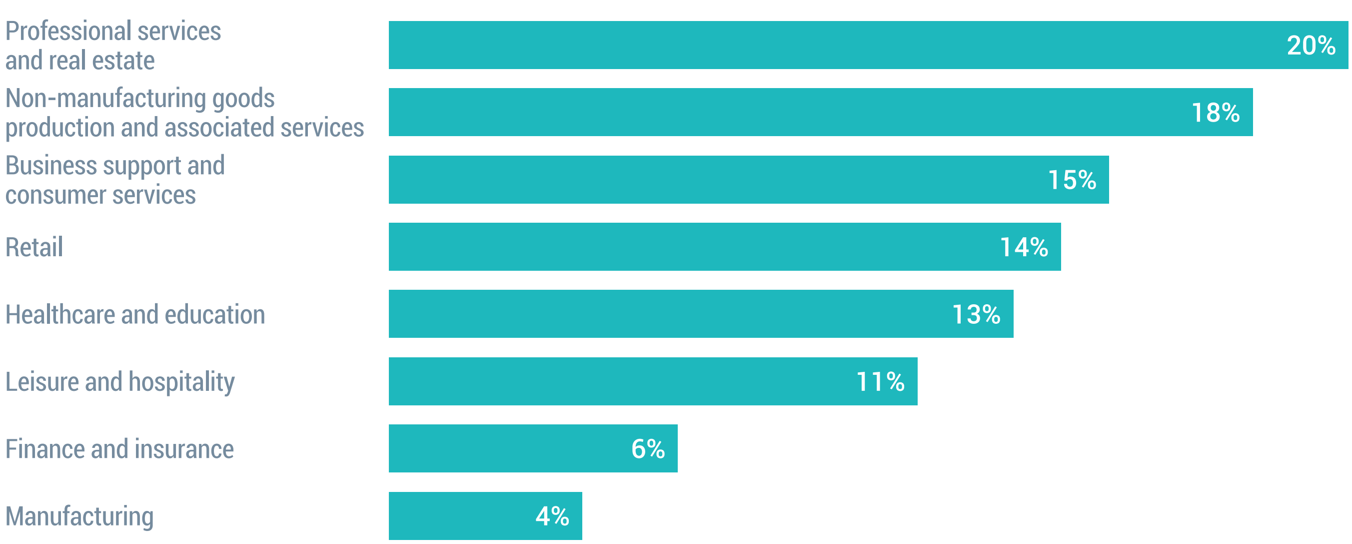
# U.S. SMALL EMPLOYER FIRM DEMOGRAPHICS (CONTINUED)

## The following charts provide an overview of the survey respondents.

**CENSUS DIVISION**[1] (% of employer firms) N=5,154




**INDUSTRY**[1,2,3] (% of employer firms) N=5,154

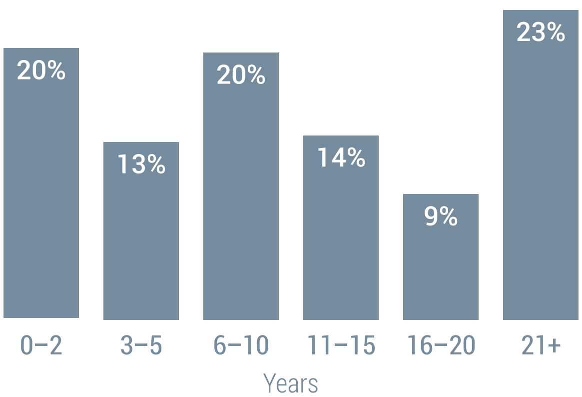



1 *Percentages may not sum to 100 due to rounding.*
2 *SBCS responses throughout the report are weighted using Census data to represent the US small business population on the following dimensions: firm age, size, industry, geography, race/ethnicity of owner, and gender of owner. For details on weighting, see Methodology.*
3 *Firm industry is classified based on the description of what the business does, as provided by the survey participant. See Appendix for definitions of each industry.*

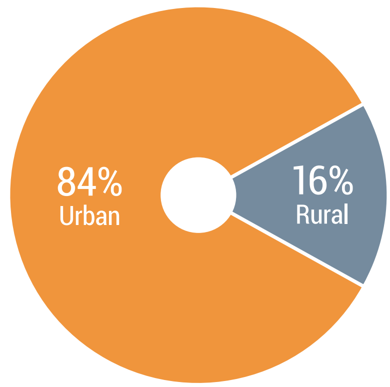
 *Source: Small Business Credit Survey, Federal Reserve Banks* 

# U.S. SMALL EMPLOYER FIRM DEMOGRAPHICS (CONTINUED)

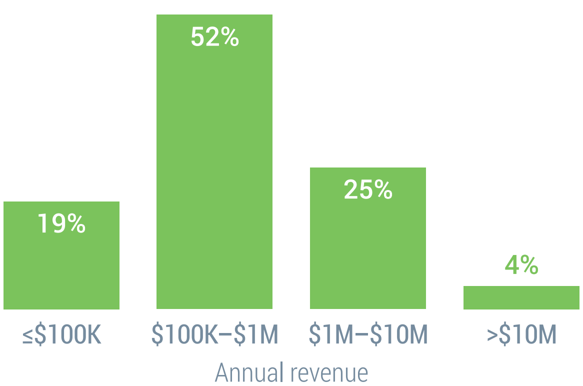
**AGE OF FIRM**[1,2] N=5,154
(% of employer firms)



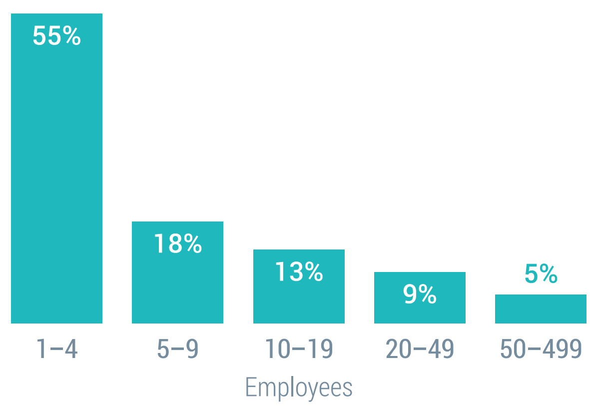

**GEOGRAPHIC LOCATION**[1,3] N=5,154
(% of employer firms)




**REVENUE SIZE OF FIRM**[2] N=5,008
(% of employer firms)




**NUMBER OF EMPLOYEES**[1,4] N=5,154
(% of employer firms)




**39%** of small employer firms use contract workers.

N=5,115

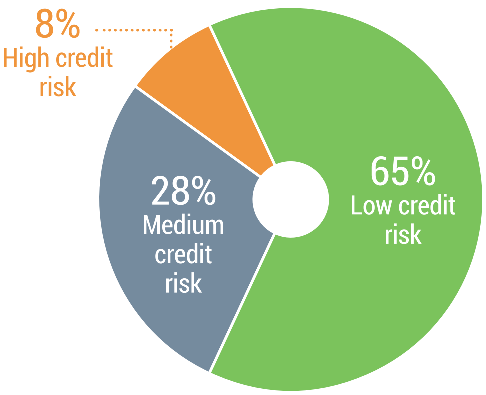
1 SBCS responses throughout the report are weighted using Census data to represent the US small business population on the following dimensions: firm age, size, industry, geography, race/ethnicity of owner, and gender of owner. For details on weighting, see Methodology.
2 Percentages may not sum to 100 due to rounding.
3 Urban and rural definitions come from Centers for Medicare & Medicaid Services. See Appendix for more detail.
4 Employer firms are those that reported having at least one full- or part-time employee. Does not include self-employed or firms where the owner is the only employee.

# U.S. SMALL EMPLOYER FIRM DEMOGRAPHICS (CONTINUED)

## CREDIT RISK OF FIRM[1,2]

N=3,415

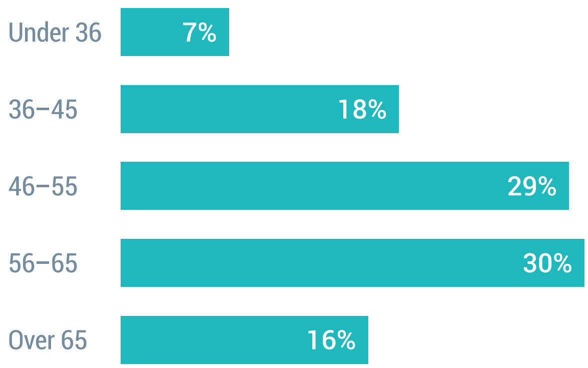
(% of employer firms)




## AGE OF PRIMARY DECISION MAKER

N=4,675

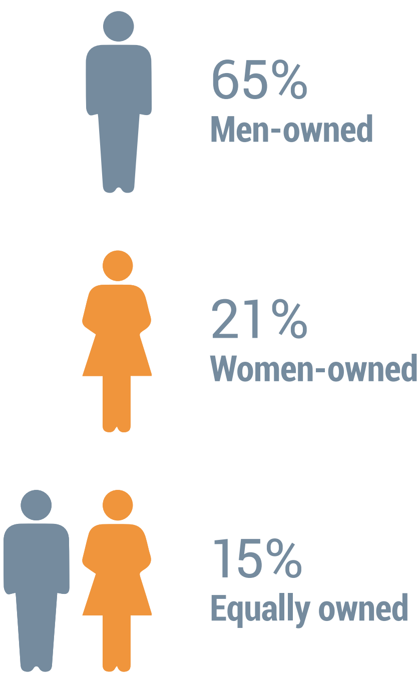
(% of employer firms)




## GENDER OF OWNER(S)[2,3]

N=5,154

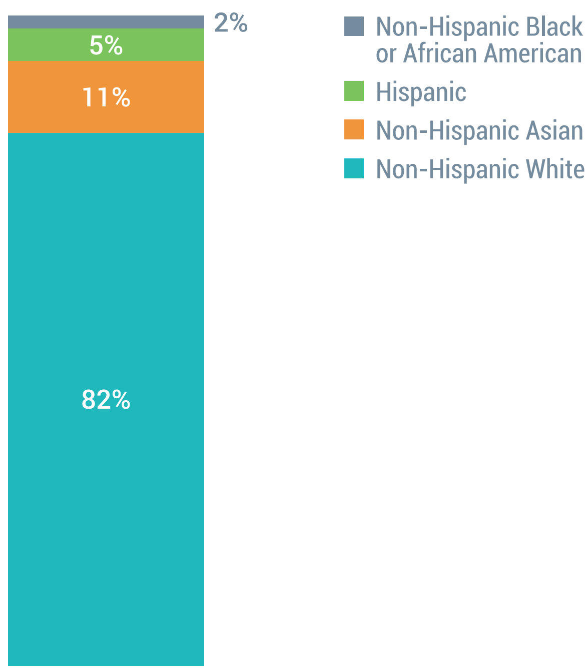
(% of employer firms)




## RACE/ETHNICITY OF OWNER(S)[3]

N=5,154

(% of employer firms)




1 *Credit risk is determined by the self-reported business credit score or personal credit score, depending on which is used to obtain financing for their business. If the firm uses both, the higher risk rating is used. "Low credit risk" is a 80–100 business credit score or 720+ personal credit score. "Medium credit risk" is a 50–79 business credit score or a 620–719 personal credit score. "High credit risk" is a 1–49 business credit score or a <620 personal credit score.*

2 *Percentages may not sum to 100 due to rounding.*

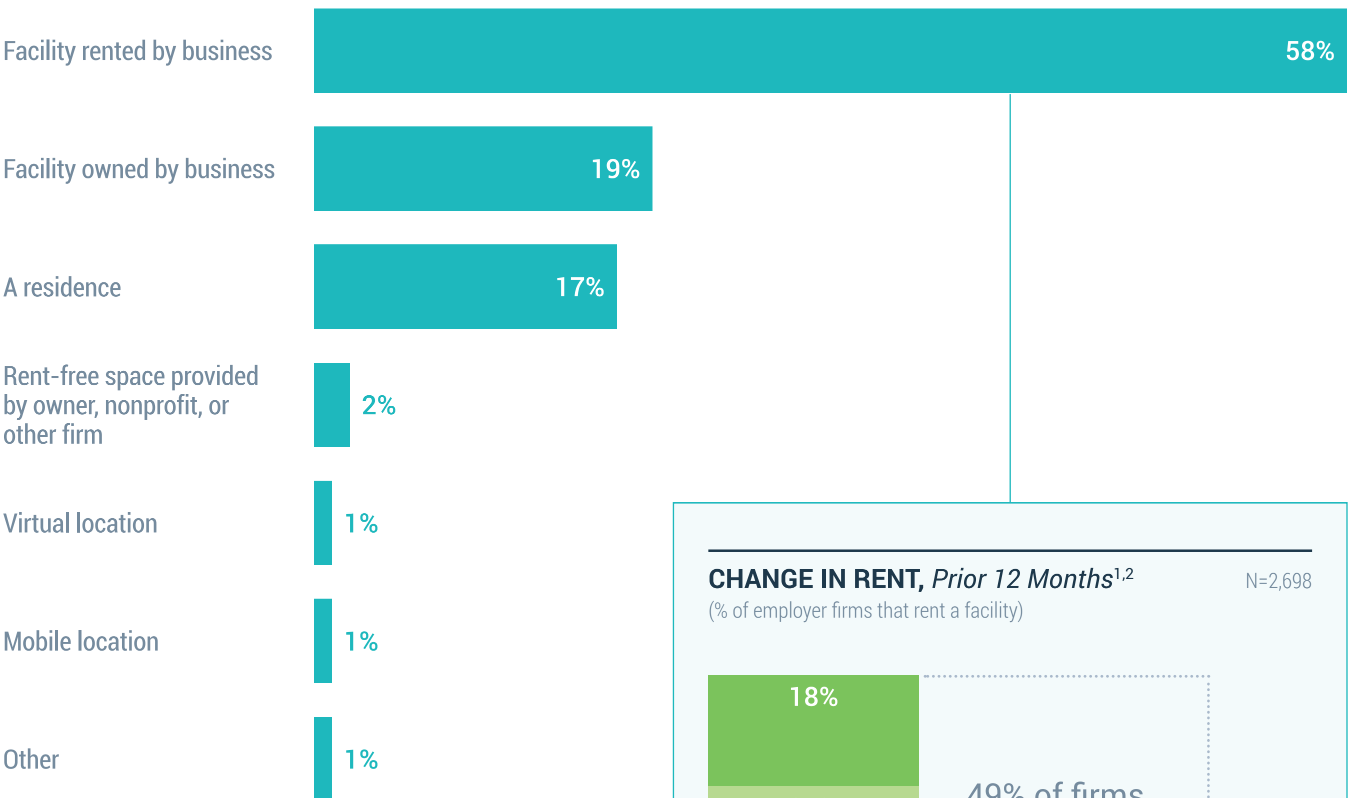
3 *SBCS responses throughout the report are weighted using Census data to represent the US small business population on the following dimensions: firm age, size, industry, geography, race/ethnicity of owner(s), and gender of owner(s). For details on weighting, see Methodology.*



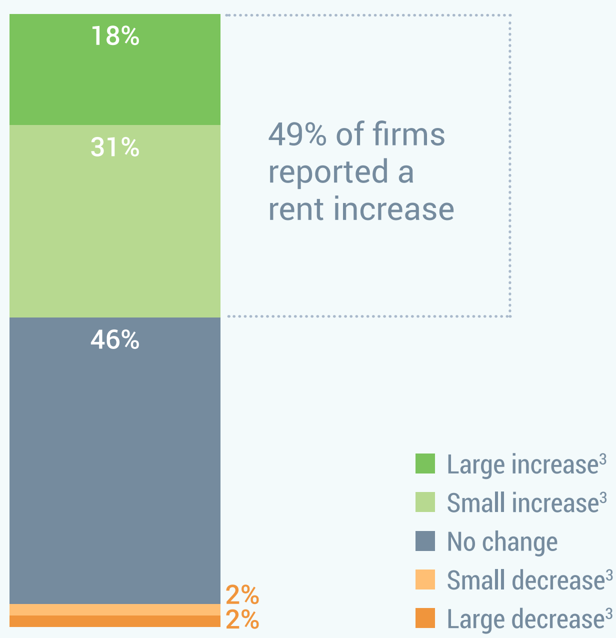
*Source: Small Business Credit Survey, Federal Reserve Banks*

## A majority of small firms rent the facility used as a business headquarters. 17% of small businesses are managed from a residence.

**TYPE OF FACILITY USED AS BUSINESS HEADQUARTERS[1]** N=4,745
(% of employer firms)




**CHANGE IN RENT,** *Prior 12 Months*[1,2] N=2,698
(% of employer firms that rent a facility)

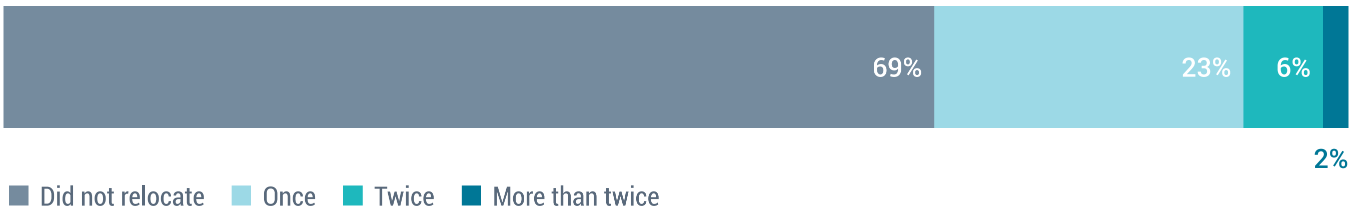



1 *Percentages may not sum to 100 due to rounding.*
2 *Approximately the second half of 2018 through the second half of 2019.*
3 *"Large" refers to a change of 4% or greater. "Small" refers to a nonzero change that is less than 4%.*

 *Source: Small Business Credit Survey, Federal Reserve Banks* 

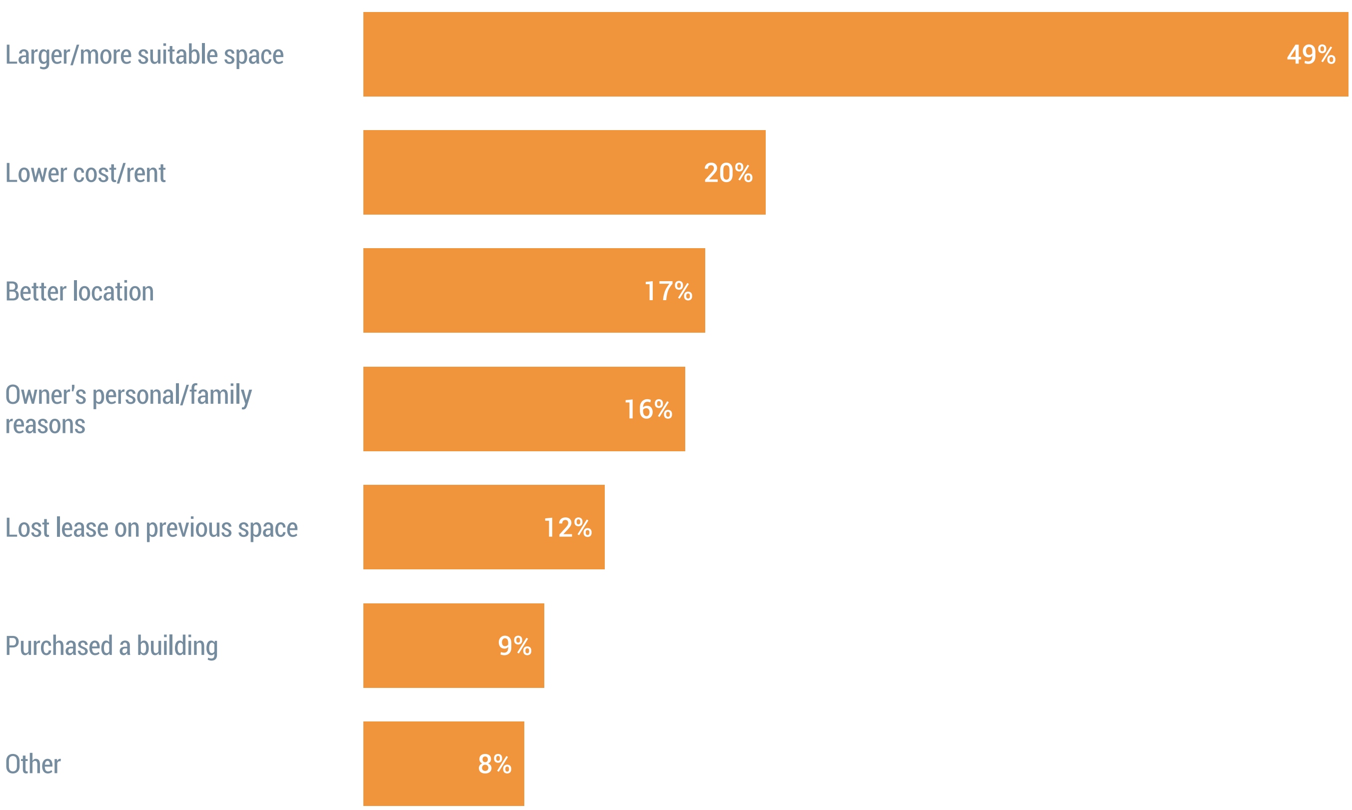
# FACILITIES (CONTINUED)

**NUMBER OF TIMES RELOCATED IN THE PAST 5 YEARS** (% of employer firms) N=4,756




## Of firms that relocated, most moved for the purpose of obtaining a larger or more suitable space. One-fifth also cited lower cost or rent as a factor.

**REASONS FOR RELOCATION**[1] (% of employer firms that relocated) N=1,394




1 *Respondents could select multiple options.*

# METHODOLOGY

## DATA COLLECTION

The Small Business Credit Survey (SBCS) uses a convenience sample of establishments. Businesses are contacted by email through a diverse set of organizations that serve the small business community.[1] Prior SBCS participants and small businesses on publicly available email lists[2] are also contacted directly by the Federal Reserve Banks. The survey instrument is an online questionnaire that typically takes 6 to 12 minutes to complete, depending upon the intensity of a firm's search for financing. The questionnaire uses question branching and flows based upon responses to survey questions. For example, financing applicants receive a different line of questioning than nonapplicants. Therefore, the number of observations for each question varies by how many firms receive and complete a particular question.

## WEIGHTING

A sample for the SBCS is not selected randomly; thus, the SBCS may be subject to biases not present with surveys that do sample firms randomly. For example, there are likely small employer firms not on our contact lists, which could lead to noncoverage bias. To control for potential biases, the sample data are weighted so the weighted distribution of firms in the SBCS matches the distribution of the small (1 to 499 employees) firm population in the United States by number of employees, age, industry, geographic location (census division and urban or rural location), gender of owner(s), and race or ethnicity of owner(s).

For the *Employer Firms Report* and analysis,[3] we first limit the sample in each year to only employer firms. We then post-stratify respondents by their firm characteristics. Using a statistical technique known as "raking," we compare the share of businesses in each category of each stratum[4] (e.g., within the industry stratum, the share of firms in the sample that are manufacturers) to the share of small businesses in the nation in that category. As a result, underrepresented firms are up weighted and overrepresented businesses are down weighted. We iterate this process several times for each stratum to derive a sample weight for each respondent. This weighting methodology was developed in collaboration with the National Opinion Research Center (NORC) at the University of Chicago. The data used to construct the weights originates from the U.S. Census Bureau.[5]

We are unable to obtain exact estimates of the combined racial and ethnic ownership of small employer firms for each state, or at the national level. To derive these figures, we assume that the distribution of small employer firm owners' combined race and ethnicity is the same as that for all firms in a given state. Given that small employer firms represent 99.8% of businesses with paid employees,[6] we expect these assumptions align relatively closely with the true population.

In addition to the U.S. weight, state- and Federal Reserve District-specific weights are created. While the same weighting methodology is employed, the variables used differ slightly from those used to create the U.S. weight.[7] State weights are generated for states that have at least 100 observations and that remain below a volatility threshold. Estimates for Federal Reserve Districts are calculated based on all small employer firms in any state that is at least partially within a District's boundary. Federal Reserve District-level weights are created for each District using the weighting process described previously, but based on observations in the relevant states.

## RACE/ETHNICITY AND GENDER IMPUTATION

Nine percent of employer firm respondents did not provide complete information on the gender, race, and/or the ethnicity of their business' owner(s). This information is needed to correct for differences between the sample and the population data. To avoid losing these observations, a series of statistical models is used to impute the missing data. Generally, when the models are able to predict with an accuracy of around 80 percent in out-of-sample tests,[8] the predicted values from the models are used for the missing data. When the model is less certain, those data are not imputed and the responses are dropped. After data are imputed, descriptive statistics of key survey questions with and without imputed data are compared to ensure stability of estimates. In the final sample, 8 percent of employer firm observations have imputed values for either the gender, race, or ethnicity of a firm's ownership.

1 *For more information on partnerships, please visit www.fedsmallbusiness.org/partnership.*
2 *System for Award Management (SAM) Entity Management Extracts Public Data Package; Small Business Administration (SBA) Dynamic Small Business Search (DSBS); state-maintained lists of certified disadvantaged business enterprises (DBEs); state and local government Procurement Vendor Lists, including minority- and women-owned business enterprises (MWBEs); state and local government maintained lists of small or disadvantaged small businesses; and a list of veteran-owned small businesses maintained by the Department of Veterans Affairs.*
3 *Weights for nonemployer firms are computed separately, and a report on nonemployer firms is also issued annually.*
4 *Employee size strata are 1–4 employees, 5–9 employees, 10–19 employees, 20–49 employees, and 50–499 employees. Age strata are 0–2 years, 3–5 years, 6–10 years, 11–15 years, 16–20 years, and 21+ years. Industry strata are non-manufacturing goods production and associated services, manufacturing, retail, leisure and hospitality, finance and insurance, healthcare and education, professional services and real estate, and business support and consumer services. Race/ethnicity strata are non-Hispanic white, non-Hispanic black or African American, non-Hispanic Asian, non-Hispanic Native American, and Hispanic. Gender strata are men-owned, equally-owned, and women-owned. See Appendix for industry definitions, urban and rural definitions, and census divisions.*
5 *State-level data on firm age come from the 2014 Business Dynamics Statistics. We derive industry, employee size, and geographic location data from the 2017 County Business Patterns. Data from the Center for Medicare and Medicaid Services are used to classify a business' zip code as urban or rural. Data on the race, ethnicity, and gender of business owners are derived from the 2016 Annual Survey of Entrepreneurs.*
6 *U.S. Census Bureau, County Business Patterns, 2017.*
7 *Both use five-category age strata: 0–5 years, 6–10 years, 11–15 years, 16–20 years, and 21+ years; and both use two-category industry strata: (1) goods, retail, and finance, which consists of non-manufacturing goods production and associated services, manufacturing, retail, and finance and insurance; (2) services, except finance, which consists of leisure and hospitality, healthcare and education, professional services and real estate, and business support and consumer services.*
8 *Out-of-sample tests are used to develop thresholds for imputing the missing information. To test each model's performance, half of the sample of non-missing data is randomly assigned as the test group while the other half is used to develop coefficients for the model. The actual data from the test group are then compared with what the model predicts for the test group. On average, predicted probabilities that are associated with an accuracy of around 80 percent are used, although this varies slightly depending on the number of observations that are being imputed.*

# METHODOLOGY (CONTINUED)

To impute owners' race and ethnicity, a series of logistic regression models is used that incorporate a variety of firm characteristics, as well as demographic information on the business headquarters' zip code. First, a logistic regression model is used to predict if business owners are members of a minority group. Next, for firms classified as minority-owned,[9] a logistic probability model is used to predict whether the majority of a businesses' owners are of Hispanic ethnicity. Finally, the race for the majority of a business' owners is imputed separately for Hispanic and non-Hispanic firms using a multinomial logistic probability model.

A similar process is used to impute the gender of a business' owner(s). First, a logistic model is used to predict if a business is primarily owned by men. Then, for firms not classified as men-owned, another model is used to predict if a business is owned by women or is equally owned.

**Table 1: Credibility Intervals for Key Statistics in the 2019 Report on Employer Firms**

| | Percent | Credibility Interval |
|---|---|---|
| Share that applied | 43.2% | +/-2.0% |
| Share with outstanding debt | 71.1% | +/-1.8% |
| Profitability index[1] | 33.2% | +/-3.8% |
| Revenue growth index[1] | 34.0% | +/-3.2% |
| Employment growth index[1] | 21.1% | +/-2.9% |
| Loan/line of credit and cash advance approval rate[2] | 78.9% | +/-3.0% |
| Seeking financing to cover operating expenses[3] | 43.0% | +/-2.7% |
| Seeking financing to expand/pursue new opportunity[3] | 55.5% | +/-3.1% |
| Percent of nonapplicants that were discouraged[4] | 14.8% | +/-2.0% |

**Table notes:**
1 For revenue and employment growth, the index is the share reporting growth minus the share reporting a reduction. For profitability, it is the share profitable minus the share operating at a loss at the end of the prior year.
2 The share of loan and line of credit applicants that were approved for at least some financing.
3 Percent of applicants.
4 Discouraged firms are those that did not apply for financing because they believed they would be turned down.

## COMPARISONS TO PAST REPORTS

Because previous SBCS reports have varied in terms of the population scope, geographic coverage, and weighting methodology, **some survey reports are not directly comparable across time**. The employer report using 2015 survey data covered 26 states and is weighted by firm age, number of employees, and industry. The employer reports using 2016 and 2017 data included respondents from all 50 states and the District of Columbia. These data are weighted by firm age, number of employees, industry, and geographic location (both census division and urban or rural location). The 2017 survey weight also included gender, race, and ethnicity of the business owner(s), as described previously.

In addition, the categories used within each weighting characteristic have also differed across survey years. For instance, there were three employee size categories in the 2015 survey and five employee size categories in the 2016 and 2017 surveys. Finally, some survey questions have changed over time, limiting question comparisons.

Due to changes in the weighting methodology of over-time data, the time series data in this report supersedes and is not comparable with the time series data (2015–2017 survey years) in the *Employer Firms Report* published in May 2018. Compared to those previous reports, the updated weighting scheme in this and last year's reports makes use of a greater number of variables (it includes the race, ethnicity, and gender of a business' ownership), and is thus more representative of the U.S. small employer firm population. 2015 Survey year data are not displayed in this report, as they lack information on the aforementioned variables. The data in this report is, however, comparable to the report containing 2018 survey data that was published in 2019. For more information on the methodological changes to the "time-consistent" weights, please refer to the methodology section of the *2019 Report on Employer Firms*.

In addition, many survey questions are not comparable over time due to changes in the response options. For example, the option "Finance company" was added as an application source in the 2019 survey; thus, the application rates by source displayed in the 2020 report are not directly comparable to prior years' reports.

## CREDIBILITY INTERVALS AND STATISTICAL TESTS

The analysis in this report is aided by the use of credibility intervals. Where there are large differences in estimates between types of businesses or survey years, we perform additional checks on the data to determine whether such differences are be statistically significant. The combination of the results of these tests and several logistic regression models helped to guide our analysis and decide on the variables to include in the report. In order to determine whether differences are statistically significant, we develop credibility intervals using a balanced half-sample approach.[10] Because the SBCS does not come from a probability-based sample, the credibility intervals we develop should be interpreted as model-based measures of deviation from the true national population values.[11] We list 95 percent credibility intervals for key statistics in Table 1. The intervals shown apply to all employer firms in the survey. More granular results with smaller observation counts will generally have larger credibility intervals.

9 *For some firms that were originally missing data on the race/ethnicity of their ownership, this information was gathered from public databases or past SBCS surveys.*
10 *Wolter (2007), Survey Weighting and the Calculating of Sampling Variance.*
11 *AAPOR (2013), Task Force on Non-probability Sampling.*